

The University of Chicago

THE ROMANIZATION OF RAETIA

A PART OF A DISSERTATION SUBMITTED TO
THE FACULTY OF THE DIVISION OF THE
HUMANITIES IN CANDIDACY FOR THE
DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF HISTORY

JUNE, 1940

By

WALTER G. L. HERRLING

CHICAGO, ILLINOIS

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CHAPTER V

THE ARMY AT WORK

Limes, Castella, Roads

The limited space of a chapter does not permit the following account to survey the work of the soldier in every detail. Extensive and varied as the soldier's activities were, his work revolved above all about the three basic tasks which engaged his attention while defending this frontier province, to wit, the limes, the castella, and the roads. The construction of the limes involved many phases of industry from lumbering to carpentry, from quarrying to masonry; the building of the castella further invoked the ingenuity of the architect and the military strategist; and the network of roads sprang from the combined efforts of the civil engineer and the construction expert. Thus, viewed as a whole, the soldier prepared plans and drew up specifications, cut stone and wood for structural purposes, burnt lime and manufactured bricks, fashioned tools and weapons in the armory, dug wells and molded lead pipes for the water system, designed bridges and erected mansiones for the highways, cast bronzes of the gods for the sacrum of the camp, and chiseled monuments for the nearby cemeteries.

The Limes

Turning first to the Raetian limes, we find that the word itself has never been defined to the satisfaction of all.¹ The

¹August Oxé ("Der Limes des Tiberius," Bonn. Jahr., CXIV (1906), 101 ff.) has perhaps the most thoroughgoing discussion on this point. Good accounts of the meaning and the purpose of the limes are given by Ronald Syme in Cambridge Ancient History (Cambridge, 1936), XI, 182-84, and H. M. D. Parker, A History of the Roman World from A. D. 138 to 337 (London, 1935), pp. 8 f. Cf. also Fabricius, "Limes," P.-W., Vol. XIII, cols. 572-74; W. Barthel, "Die Erforschung d. obergerm.-rät. Limes," III Bericht d. röm.-germ. Kom., pp. 175 f.; Hans Delbrück, Geschichte der Kriegskunst (Berlin, 1902), Part II, pp. 158 ff.; Ernst Nischer, "Die Zeit des stehenden Heeres" in J. Kromeyer-G. Veith, Heerwesen u. Kriegsführung (München, 1928), p. 553.

literary references to the limes in general are scarce, and, worst of all, confusing.² The Romans themselves used the word to designate a variety of concepts, and in the course of time the genesis of its meaning led to several transformations as applied in the provinces. For our purposes, there is no need of confusion: we shall apply the term specifically to the artificial northern boundary of Raetia which was backed by military defenses to secure its safety. In its narrowest sense, the Raetian limes was this border line when the province had reached its greatest extent. The limes was constructed in such a way that its outline can be traced on the surface even now for long distances at a time. Popular parlance still refers to it as the "Teufelsmauer" or the "Schweinsgraben," and shrouds the remains in a legendary origin.³ Other designations persisting to the present time are "Pfahl," "Pfahlrain," "Pfahlheck," and "Pfalz."⁴

The purpose of the limes was primarily to protect the province. Much has been said to the contrary; namely, that the physical defenses along the limes were not formidable barriers, and that the forts were situated in the hinterland behind the border for the purpose of defense.⁵ The Raetian limes, unlike the limes in Britain, may not have been designed originally to

²Literary sources are compiled in Friedrich Koepp, Germania Romana (Bamberg, 1924-30), 2d ed., I, 31 ff. Delbrück (p. 133) records the seven places where Tacitus uses the word.

³Cf. O. Paret, Die Römer in Württemberg (Stuttgart, 1932), III, 259. Legend has it that the devil asked God for a piece of land as large as he could enclose with a wall or a ditch in one night. He started the work with the assistance of a hog, or, as some have it, alone in the form of a hog. But he had been too ambitious, for the sun arose before he had completed his task. Angered, the devil then destroyed what he had completed, and the remains are therefore still known as "Teufelsmauer" or "Schweinsgraben." Tradition points to the "Göckelerturm," south of Welzheim, as the tower on which the cock stood when he crowed to announce the new day, before the devil had completed his task.

⁴The use of Pfahl, derived from the Latin "palus," dates back to the third century and is recorded in writings from the eighth century. Cf. Fabricius, P.-W., Vol. XIII, col. 602.

⁵Theo. Mommsen (Roman Provinces [New York, 1909], I, 156 f.) stated his preference for the non-military purpose of the limes so effectively that others have followed him. Ernst Kornemann ("Limesforschung," Klio, VII [1907], 86) supports the postulate that the purpose was ^{above} all military; but later, from the time of Hadrian on, the military purpose, he argues, was supplanted by the purpose of regulating and supervising intercourse over the boundary and of collecting border duties (ibid., p. 98).

prevent invasions by holding the enemy at bay; nevertheless, it did do this in actual practice. When the enemy had once pierced the limes, it usually penetrated far into the interior, and if we eliminate the Roman army behind the limes, there was not a sufficient force left to insure the safety of the province. The outposts along the limes were prepared to observe any hostile move by the Germans, since they were linked together through speedy communication by signals. The treatment of the barbarians who crossed the limes shows that the Romans desired to impress them with a display of Roman power.⁶ The significance of the limes for civil purposes was not, by any means, excluded by the military. Thus the limes did carefully control and supervise intercourse between Raetia and the Germany of the barbarians; it imposed duties and collected tolls; it prevented the export of gold and weapons.

The limes served its purpose well. Its military strength permitted a re-allocation of forces in other provinces, notably in Upper Germany, where the number of legions was steadily reduced as the Raetian and German limites were developed. In Raetia itself the limes guaranteed security, without which Roman life could not have flourished. The highest development of the province coincides with the period when the limes held the barbarians out most effectively.

The Raetian limes, as we think of it, was not the outcome of a planned development with the final stage as the objective, but was, rather, the result of a normal growth which had its genesis in the first century and attained its definitive form in the second century. Augustus established nothing which can be associated with the limes idea.⁷ To Augustus the conquest of

⁶We have two literary references, both from Tacitus, which show how the Germans were handled. The Bructeri complained to the people of Cologne (Tacitus Hist. iv. 64) that the Romans had shut them off from the streams, from the land, and from heaven itself, as it were, so that those who were born for arms had to meet under supervision, without arms, naked, so to say. And again Tacitus (Germ. 41) relates that the Hermanduri were the only Germans who could trade not only along the border but even in Raetia where they were admitted to the homes, while other Germans were disarmed and then taken on tour to view Roman weapons and the camp. Cf. Curt Woyte, Antike Quellen (Leipzig, 1912-19), II, 90 f. It should be remembered that these remarks were recorded before the limes had been built in Raetia.

⁷Cf. Barthel, VI Bericht d. röm.-germ. Kom., p. 166.

Raetia was a protective measure for Italy, and his interest was to place the troops so that this objective was attained. Then, too, Augustus was pre-eminently and almost exclusively interested in other problems of the German frontier.

The first germ of what came to be the limes appears under the Claudian emperors, particularly in the thirteen years of Claudius' reign, when the Roman frontier played an important role in imperial policy. Tiberius may have established a hold on the heights of Aislingen.⁸ With Claudius a change of policy resulted; the realization had grown that the safety of Italy was linked more closely with the safety of Raetia. It is for this reason that he reached out and fortified Aislingen, if this had not been done before, and Risstissen, and possibly Günzburg, which means that a large sector was fortified up to the Danube.⁹ These are merely the definitely known fruits of his labors here, but traces of his activity have been found at other places along the Danube as well.¹⁰ The significant change is that Claudius developed a chain of fortresses. The Via Claudia Augusta also added power to these defenses, because of the added facilities for transporting troops and supplies.

The south bank of the Danube offered difficulties in building fortifications near the water. To military men expansion beyond the Danube was therefore an urgent expediency. This was accomplished by the Flavian emperors, especially Vespasian and Domitian, whose energetic policies on the Danube resulted in a new line of defense. The sources now begin to flow more freely; yet it is not easy to see clearly what was done in detail. Inscriptions recovered at Eining (79-81 A. D.) and at Günzburg (77/8 A. D.) attest to Vespasian forts on the Danube. In addition Oberstimm and Kumpfmühl (near Regensburg), Straubing, and Passau have pro-

⁸Robert Knorr, Die Terra Sigillata Gefässe von Aislingen (Dillingen, 1913), p. 1, and especially p. 50.

⁹Fabricius, P.-W., Vol. XIII, cols. 605 f.; Haug, "Raetia," ibid., Vol. IA, col. 50.

¹⁰Especially at Emerkingen, southwest of Risstissen (Ludwig Sontheimer, "Emerkingen Sigillaten," Fund. a. Schwaben, XXI [1913], 51, and Knorr, "Neugefundene frühe Sigillata aus Württemberg," ibid., pp. 112 f.). Fabricius (P.-W., Vol. XIII, col. 605) mentions possible contacts at Hüfingen, Ennetach-Mengen, Mertingen and Mühlhartsfurt, and perhaps Oberstimm, in addition to those already mentioned.

vided finds which point to Vespasian.¹¹ Vespasian pushed the line of fortifications to the north bank of the Danube from Faimingen to Eining. Beginning in the west, finds at Aislingen cease and Faimingen takes its place. Nassenfels has produced much south-Gallic sigillata ware of this period; the castellum at Kösching was dedicated to Titus and Domitian,¹² and Pförring completed the link with Eining, south of the Danube.¹³ Vespasian also, as we shall note later, consolidated the frontier defenses with the construction of roads. Some of this work, usually attributed to Vespasian, was perhaps carried to completion by Titus, or especially Domitian. At any rate, it was completed in approximately the early Domitian period. Domitian did much for the development of the German limes, and his program naturally extended into Raetia also.¹⁴ His efforts pushed Roman authority farther north all along the line from Kösching westward. In the west he included the Swabian Alb and established forts on the road from Upper Germany to Raetia via Cannstatt to Günzburg and Faimingen. The castella were placed at Burladingen, Gomadingen, Donnstetten, Urspring, while Günzburg and Faimingen were replaced by Heidenheim and Oberdorf, respectively, both considerably farther to the north.¹⁵ From Oberdorf the new limes included the Bavarian alb with castella at Munningen, Gnotzheim, Weissenburg, Pfünz, and joined with the Vespasian limes at Kösching, crossing the Danube

¹¹Eining: Fridericus Vollmer, Inscriptiones Baivaricae (München, 1915), No. 332; Günzburg: Vollmer, No. 196. Cf. Fabricius, P.-W., Vol. XIII, col. 606. For the early development of the limes, see Syme in Cambridge Ancient History, XI, 166 f.

¹²Vollmer, No. 257.

¹³Cf. Fabricius, P.-W., Vol. XIII, cols. 606 f.; Haug, ibid., Vol. IA, col. 51. Knorr ("Terra Sigillata von Geislingen," Fund. a. Schwaben, XXII-XXIV, 32 f., 35) and Gössler (ibid., p. 31) conclude that the Romans were in control of Geislingen at the time of Vespasian. Knorr is rather emphatic in his contention that Geislingen was of great importance from 74 to 90 A. D. He thus places the western limes of Vespasian at Balingen-Gomadingen-Donnstetten-Urspring-Heidenheim.

¹⁴The only literary reference to the limes of Domitian was made by Frontinus (I. 3. 10), but it has been debated whether the original reading is "limitibus" or "militibus."

¹⁵For Burladingen, see Knorr (Töpfer u. Fabriken verziert. Terra Sigillata d. I. Jahr. [Stuttgart, 1919], p. 94). The Geislingen terra sigillata very logically have their beginning at this time, since Geislingen is situated north of Urspring and could fit in better with Heidenheim.

to the south at Eining.¹⁶ It is very possible that some of this advance, particularly in the Bavarian Alb, should be credited to Trajan, since it was in keeping with his frontier policy.¹⁷

Alterations of the limes under Trajan and Hadrian should be viewed as a unit. Trajan was personally acquainted with the requirements at the limes through his visits there, and, in general, continued the policies of the Flavians.¹⁸ Trajan extended the limes a trifle on the west between Lorch and Bopfingen, abandoning Oberdorf and Burladingen, and from Munningen to Pfünz. Stone castella now took the place of the old earth fortresses, and large stretches of the limes were connected into a more formidable barrier with the construction of palisades, fences with interwoven meshwork of twigs, and wood towers with their characteristic ring defenses. These changes most probably were the work chiefly of Hadrian, whose visit to the province in 121 resulted in a keen and direct interest, which is indicated by the elevation of Augusta Aelia to the rank of a municipium and by the new series of coins in honor of the "exercitus Raeticus."¹⁹ Trajan's aggressive policy had added land to the Empire which could not be protected easily against the barbarian comers. Hence Hadrian resolved to protect the frontier, not only in Raetia, with the aid of stronger artificial defenses. This was not so much a fundamental break with the traditional policy, as a practical realization of conditions as they existed.²⁰ Common sense dic-

¹⁶Fabricius, P.-W., Vol. XIII, cols. 607 f.; Barthel, III Bericht d. röm.-germ. Kom., pp. 168, 192; Haug, P.-W., Vol. IA, col. 51. It should be stated here that Tacitus (Germ. 41) clearly refers to an earlier period when he states that the Danube was the northern boundary of Raetia.

¹⁷Trajan, as Syme (p. 182) has pointed out, perhaps has generally been given too much credit for his part in the building of the limes.

¹⁸Fabricius, P.-W., Vol. XIII, cols. 608 f.; Haug, ibid., Vol. IA, cols. 51 f.

¹⁹The Historia Augusta (v. Hadriani 12) relates that Hadrian built palisades and walls along the frontier, and so he is usually credited with beginning this work in Raetia also. Furthermore, the palisades are not found on Trajan's column, while they are depicted on the column of Marcus Aurelius. Cf. Koepp, Die Römer in Deutschland (Beilefeld and Leipzig, 1926), p. 74; Fabricius, P.-W., Vol. XIII, col. 576; Haug, ibid., Vol. IA, col. 53. For the "exercitus" series of coins see pp. 19 and 75.

²⁰Haug (P.-W., Vol. IA, col. 53) and Kornemann (Klio, VII [1907], 88, 98) are very emphatic in attributing to Hadrian

tated this policy; it was the conclusion of a soldier. In accord with this plan, Hadrian made several shifts which were decided improvements from the military point of view. Thus castella were established at Ruffenhofen and Theilenhofen, very probably between 125 and 130, while Gnotzheim as a result was made superfluous and therefore was probably abandoned.²¹ Other castella may have been created at this time also, or else must be credited to his successor, Antoninus Pius.

The limes in Raetia, as in Upper Germany, reached its final form under Antoninus Pius. This means that it now followed the well known course from Lorch, Upper Germany, to the Danube, a little below Eining, with a sweeping northward bulge in the middle. Only a few adjustments were needed on the eastern half of the limes to attain this end. In the west, where the greater change took place, we again have the shifting of castella from the old to new points of defense, such as Schierenhof for Donnstetten, Unterböbingen for Urspring, Aalen for Heidenheim, Buch for Oberdorf, Halheim for Septemiacum (Wössingen?), Ruffenhofen for Munningen, Dambach for Gnotzheim, which was re-occupied for at least some of the time.²² Antoninus Pius also continued the work of strengthening the border along the limes, which had been undertaken by his predecessors. Marcus Aurelius left the limes as it was. There was little, if any, shifting, since the German threat demanded at least as strong a military force as had always been maintained on the border, even though the legion was now encamped at Regensburg on the Danube line. The great amount of activity along the entire German border under Commodus did not affect the outward form of the limes materially. By the time of Commodus all breaches had been repaired.

The Raetian limes again demanded serious attention under Caracalla. The Germans pierced and shattered it in large areas,

a policy of retrenchment, which was inspired by an uncomely spirit of temerity. There is really nothing derogatory which might reflect on Roman valor, it seems to me, in what Hadrian did. The limes, in Raetia for example, had just about reached that point where the integrity of the boundary was most easily maintained; more might have been less, as far as Rome's advantage was concerned. Cf. Syme, Cambridge Ancient History, XI, 135 f.; Wilhelm Weber, ibid., p. 312.

²¹Cf. Friedrich Hertlein, Die Römer in Württemberg (Stuttgart, 1928), I, 98 f.

²²Cf. Fabricius, P.-W., Vol. XIII, cols. 609 f.

destroying and devastating all that fell before them as they rushed in. As a result there was a concentration of troops, even from Britain and Egypt, such as the Rhenish-Danubian frontier had never seen before. In August, 213, Caracalla appeared in person to lead his troops in the campaign, which ended in a victory for the Romans in September.²³ With this experience to his credit, Caracalla resolved to insure the future of the limes. The form was not changed, but now a wall, the so-called "Teufelsmauer," was created to offer a more serious obstacle to the barbarians.²⁴ Caracalla's intensive program of road construction, as we shall see later in this chapter, is another indication of this intention.

The remaining story of the limes proper is vague. The invasion of the Alamanni in 233/4 again tore jagged holes into the frontier defense, but Severus Alexander apparently was still able to patch up the damaged spots, although he was not able to retrench without loss, such as the castella at Pfünz and Böhming.²⁵ The inevitable was to happen shortly afterward, however, when the entire limes and the trans-Danubian area were lost to Rome in the invasion of the Alamanni in 259/60.²⁶ The Tabula Peutingeriana gives us the last glimpse of what the situation was before the Romans evacuated.

That was the end of the limes proper; never again did the Romans succeed in building a fortified line of border defense of this nature in Raetia. Frantic efforts to safeguard Roman land by means of chains of forts followed, but all of these failed to

²³Dio Cassius lxxviii 13. 4.

²⁴Vollmer, Nos. 280, 281. A good idea of Caracalla's work in Raetia can be gained from a glance at Vollmer's index (p. 195). I have gone into greater detail with the situation under Caracalla because the construction of the stone wall has been attributed to other emperors. Thus G. T. Rudhart (Altteste Geschichte Bayerns [Hamburg, 1841], p. 74) assigns the construction of the wall to Probus, at least some 64 years later; while Haug (P.-W., Vol. IA, col. 54) and Koepp (Die Römer in Deutschland, p. 82) deem it probable that Commodus constructed it. This change dovetails most logically with Caracalla's work, it seems to me. Syme (Cambridge Ancient History, XI, 181), Parker (pp. 88, 93), and Fabricius (P.-W., Vol. XIII, cols. 603, 611 ff.) incline towards this view.

²⁵As stated in a previous chapter (*supra*, p. 18), the limes was not abandoned at this time. Cf. Paul Reinecke, "Ein neuer Münzschatz aus Kösching-Germanicum," Germania, XVIII, 135 f.

²⁶Vollmer, No. 202, is the last inscription from this area.

endure for any great length of time. The Itinerarium Antonina records that the Roman line in the west dropped down from the Danube to Lake Constance from Günzburg, Kellmünz, Kempten, and Isny to Bregenz, while Danube fortresses are still recorded in the Notitia Dignitatum. This line of forts crumbled at the latest in 389.²⁷

In recapitulation, we may say that the origin of the limes proper is traceable to the Flavians, its significance was enhanced by Hadrian, its outward form attained its final extent under Antoninus Pius, Caracalla contributed its stone wall and ditch, and Gallienus lost it for all time.

The following discussion deals with the limes proper as it ran its course from Lorch, Upper Germany, to a point on the Danube river near Hienheim, a little below Eining. From Lorch it turned slowly northward above Schierenhof and Unterböbblingen; crossed the Kocher above Aalen; then crossed the Jagst near Basel; passed through Halheim and crossed the Wörnitz at Ruffenhofen; continued northward through Dambach, where it left Württemberg and entered Bavaria; then across the Altmühl for the first time, reaching Gunzenhausen, the northernmost point on the limes; thence southeastward it passed above Theilenhofen to reach Harlach; crossed the Altmühl again near Böhming; then in a generally straight line with only one curve touched the Danube near Hienheim. Its total length in Raetia was approximately 108 miles, or 166 kilometers, of which 51 kilometers were in Württemberg. Unlike the early German limes, which was very crooked, and unlike the late German limes, which ran on a straight course for considerable distances at a time, the Raetian limes was composed of a series of straight lines from one-fifth to over ten kilometers in length.²⁸ The limes was, furthermore, a single line, and was not, as was formerly supposed, bolstered by a second limes farther inland.

The palisades, constructed by Hadrian and possibly begun by Trajan, appear to be the first endeavor to throw up an artificial barrier.²⁹ Traces of palisades are found only on the

²⁷Hertlein, I, 190; Fabricius, P.-W., Vol. XIII, cols. 611 f. The individual forts will be discussed later in this chapter.

²⁸Hertlein and Gössler, Die Römer in Württemberg, II, 291-300; Fabricius, P.-W., Vol. XIII, col. 613.

²⁹Hertlein and Gössler, pp. 285 f., and Fabricius, P.-W., Vol. XIII, cols. 613 f., are the best accounts readily avail-

German and Raetian limites, and they are found at many places here. The barrier of wattle (Flechtwerk), traces of which have been discovered underground here and in Upper Germany, does not seem to be older than the palisades. It has been suggested that this was of a temporary character, employed during the building of the more formidable palisades. The palisades of the German and Raetian limites were apparently built at the same time, as they harmonize in their dimensions, form, and general makeup. The palisades sometimes appear in front of, and then behind, the later wall, showing definitely that the wall replaced them as a barrier. The palisades thus also conformed more closely to the topography of the limes area. Oak beams, split lengthwise and with mortises for cross-braces underground, have been found. The course of the palisades can be traced above ground in many places to the present day, since they have left a depression from one and one-half to two meters wide in some localities. The column of Marcus Aurelius, on which the Danube defenses fairly bristle with palisades, gives us the best idea of how they were constructed. The so-called "Teufelsmauer," whose construction we have attributed to Caracalla, consisted of moderately-sized stones, which were quarried nearby. Kilns have been found also where the lime was burnt. The wall varies in thickness from one to one and a half meters, and rises to a height of two and a half to three meters. No endeavor was made to finish off the top with mortar or by pyramiding the stone. Holes were left in the wall at intervals to permit the passage of water. In swampy and soft spots piles were driven into the ground to carry the burden of the stone wall.

The Castella

On the limes, and frequently attached to the wall, were a large number of watchtowers, first built of wood with a stone foundation, later built of stone entirely. The rectilinear construction of the limes was purposely followed to provide speedy signaling service from tower to tower, although they were not used for telegraphing, that is, the sending of complete messages.³⁰

able. Cohausen and Schröder doubted whether palisades could be constructed here (cf. Delbrück, Part II, p. 158).

³⁰ Riepl, Das Nachrichtenwesen bei den Römern (Leipzig, 1911), p. 110.

About one thousand watchtowers have been estimated for the German and Raetian limites together, of which ninety-six have been found or can be safely surmised for the Raetian limes in Württemberg alone.³¹ Thus signals could be flashed along the entire limes of Upper Germany and Raetia. Remains of such towers have also been found on elevations between Weissenburg and Pfünz, which makes it very probable that the limes had a signal system to communicate swiftly with the castella in back of the limes.³² Towers on crossroads were commonly employed in all provinces. The soldiers who were detailed for guard duty at the watchtowers were taken from the castella which were placed at varying distances behind the limes.³³ These castella were not an integral part of the limes itself, but were situated at strategic points so that the troops were at the beck and call of the limes guards. This fact has led some to conclude that the limes did not primarily serve a military purpose. Each castellum housed one unit, never more. There was no Roman road following the limes proper, but some of the castella near the limes, such as Dambach, Gunzenhausen, and Böhmung, were connected with other castella.³⁴ Then, too, in addition to the north-south roads, there was the so-called limes-road, which at times came close to the limes in its passage from Künzing, Upper Germany, to Regensburg via Donnstetten, Urspring, Heidenheim, Oberdorf, Septimiacum, Munningen, Gnotzheim, Theilenhofen, Weissenburg, Pfünz, Kösching, Biburg at Pförring, Kelsbach, and Eining.

The patrol on the limes was composed almost exclusively of auxilia. No legions or even detachments of legions were ever detailed for border service on the Raetian limes, although as we have seen, legionaries were temporarily employed to assist in making repairs or do construction work. Since the time of Hadrian numeri were also employed for this service. These units, relatively speaking, were shifted very little, as far as our evidence

³¹For estimates, see Hertlein, I, 128; Hertlein and Gössler, II, 291.

³²Fabricius, P.-W., Vol. XIII, col. 582.

³³Hertlein (I, 128) hazards the guess that about 100 large and small castella were strewn along the German-Raetian limes.

³⁴F. Winkelmann, "Die vorröm. u. röm. Strassen in Bayern zw. Donau u. Limes," XI Bericht d. röm.-germ. Kom., p. 40. Roads will be discussed later in this chapter.

goes. The alae and cohorts were so distributed in the castella at or near the limes that ala castella generally appeared in a ratio of one each to three cohort castella. Aalen (Heidenheim formerly), Ruffenhofen, Weissenburg, Kösching, and nearby Pförring were definitely established as ala castella.³⁵ An ala castellum with the nearby cohort castella seems to have formed a military district under the control of the commander of the ala castellum. Thus, for example, the Aalen district included Schierenhof, Unterböbingen, and Buch; Ruffenhofen possibly controlled Halheim, Dambach, and Gnotzheim; Weissenburg: Gunzenhausen, Theilenhofen, and Harlach; Kösching: Pfünz and Böhmig; Pförring, possibly, only Eining on the other side of the Danube. Estimates in regard to the number of soldiers actually engaged on the limes for patrol service are necessarily mere guesses, since it is impossible, as we have seen, even to calculate with any degree of accuracy the number of troops serving in the entire province. Some figure might be arrived at by adding up the possible number of soldiers in the so-called limes castella, but this would help very little because only a relatively small number was engaged in actual border patrol at any given time.

The castella were distinctively the work of the soldiers. Everything that went into the building of the forts was the result of planning, designing, and constructing by the Roman soldier. This was his home; hence it reflected Roman culture perhaps more than any other work of the soldier. The bath, the masonry, the wall decorations, the hypocaust--all was done according to the accepted manner of the Roman. In and near the castella excavations have brought forth foundation walls, magazines, spear points, lances, swords, blinds for horses, knives, hypocausts, tegulae and potters' kilns, glass window panes, coins, enameled brooches, spirals, bronze disks, fibulae, rings, buttons, glassware, clay vessels, pipes, hollow tile, household and carpenter tools, pots, lamps, statues of gods, bells, chains, articles of bone, spoons, needles, nails, and keys. To the natives all these must have conveyed a profound lesson in Roman arts, crafts, and mode of living, which he did not hesitate to learn in a short time. The fact that practically all castella in Raetia were built by the auxilia

³⁵See Appendix III. Cf. Emil Ritterling, "Zwei Münzfunde aus Niederbieber," Bonn. Jahr., CVII (1901), 129.

does not alter the significance of this materially. There is a remarkable sameness; in fact, time itself made few changes. Plans were supplied from general headquarters, it appears, and these were carried out with only such changes as local conditions demanded.

The number of castella in Raetia was fully adequate to safeguard the province under all normal conditions.³⁶ Furthermore, the castella were placed only near the frontier, thus leaving no second line of reserves in the rear for emergency purposes (except in the late Roman period, as we shall see).

The two camps of the legions at the time of Augustus were the first in Raetia, but they were occupied for such a short time that the camps were perhaps not developed into castella. The camp site at Oberhausen, near Augsburg, has been all but obliterated, and the second has not yet been located definitely. With Claudius the work of building a chain of castella was really begun. So in the first century, with possibly the exception of Steinkirchen, the entire frontier along the Danube was fortified with sixteen castella, beginning in the west, as follows: Mengen-Ennetach, Emerkingen, Risstissen, "Illermündung," Unterkirchberg, Günzburg, Aislingen, Faimingen, Druisheim, Oberstimm, Eining, Regensburg, Straubing, Steinkirchen, Künzing, Passau. Eight of these, all west of Eining, were certainly abandoned when the frontier was pushed northward and when Domitian created eight new castella, which are usually called the Domitian limes. This line included the following: Burladingen, Gomadingen, Donnstetten, Geislingen, Urspring, Heidenheim, Oberdorf, and Munningen. By the time of Antoninus Pius all of these were abandoned, and the limes now was studded with sixteen castella, as follows: Freimühle, Schlierenhof, Unterböbingen, Aalen, Buch, Halheim, Ruffenhofen, Dambach, Gnotzheim, Gunzenhausen, Theilenhofen, Weissenburg, Pfünz, Böhming, Kösching, and Pööring. Including the six castella from Eining to Passau on the Danube, we have then twenty-two castella protecting the frontier during that troublesome century from Antoninus Pius to Gallienus.³⁷ The next glimpse we

³⁶Our study (vide infra) includes 59 castella. Augsburg, the Augustan legionary camp at Oberhausen, and 19 castella which were occupied in the late period would only bring the number of castella down to 38 for the entire period from Claudius to Gallienus.

³⁷Some castella on the limes did not remain occupied till Gallienus; for example, Buch, Gnotzheim, and possibly a few

have takes us to the late period of Roman occupation when twenty-four castella are known to have been occupied, but not all of these were occupied at the same time.³⁸ Below Lake Constance were five castella: Eschenz, Pfyn, Arbon, Ad Rhenum, Confluentes ad Rhenum; four between Lake Constance and the Danube: Bregenz, Isny, Kempten, and Kellmünz; nine along the Danube: "Illermündung," Günzburg, Piniana, Drusheim, Parrodunum, Manching, Eining, Regensburg, Passau; four in the interior: Chur, Zirl, Füssen, and Pfaffenhofen; one at the unidentified Venaxamodurum. The four castella of the interior represent the first endeavor to supply a genuine reserve or shock line of defense, if it can be called such, for Chur, way down on the Hither Rhine, the pairing of Zirl with Füssen, and Pfaffenhofen with Seebruck (Bedalum), of Noricum, hardly constituted a line. The first three were placed there primarily to guard Alpine passes, and not a frontier.

The site for a castellum was selected with great care. Matters of prime concern were the relation of the proposed site to the immediate physical surroundings, elevation of the site, the slope of the grounds, the position of the enemy, the location of the road, and the water supply.³⁹ The castella on the German and Raetian limites were not placed as near to each other as on the British frontier, and, naturally, the distance varied according to physiographic opportunities.⁴⁰ The castellum was normally placed so that it faced the enemy, but Weissenburg faced away from the enemy, while Buch and Aalen offered him their left side. The shape was as nearly a square as possible. Sometimes it was quite distorted, as at Oberdorf, where the Domitian castellum was in

others. On the other hand, Faimingen continued to Caracalla, or later.

³⁸For a good treatise of the late castella, see Eduard Anthes, "Spätrom. Kastelle u. feste Städte im Rhein- u. Donaugebiet," X Bericht d. röm.-germ. Kom., pp. 142 ff.

³⁹Occasionally the best had to be made of the unfavorable location which nature offered. Thus the castellum at Urspring sloped 20 meters from one side to the other. Cf. Hertlein and Gbessler, II, 238.

⁴⁰G. H. Allen (The Roman Cohort Castella ["University Studies, University of Cincinnati (Cincinnati, 1907)], p. 10) offers the following tabulation of average distances between castella: Upper Germany, ca. 10 km.; Britain, ca. 5 km.; Caledonia, ca. 3 km. The Domitian castella were spaced at intervals averaging 23 km. Cf. Barthel, VI Bericht d. röm.-germ. Kom., p. 172.

the form of a trapezium. Two irregular fortresses of the late period were the castella at Kellmünz, really a heptagon roughly in the shape of a square, and at Isny, where the camp was a very irregular and elongated pentagon.

The walls of the castella were made of earth in the early period. Later the earthwork was replaced by a more formidable defense in stone. This metamorphosis can be observed in a number of instances; at Urspring, for instance. The stone wall was built firmly to serve its purpose most effectively, measuring from one to almost two meters in thickness--thus at Aalen and at the late castellum at Bettmauer near Isny. But the wall was not the first part of the castellum to receive the full brunt of an attack. The castella were equipped with V-ditches of a meter or more in depth. The number varied from one to four in Raetia. The double ditch was the most common arrangement. Buch had a single moat; the Claudian camp at Unterkirchberg had two; while the Vespasian reconstruction had only one. At Burladingen the two ditches were retained throughout the remodeling of the castellum. Künzing and Straubing were equipped with four ditches. Posts or palisades were also employed in the fortification of the wall, as post-holes found at Gnotzheim and Gunzenhausen show. Towers were placed on the wall at the corners, as at Freimühle and Halheim on the limes and the remodeled castellum at Eining under Diocletian. At Halheim and Freimühle towers were also placed on the sides since the regular gateways were absent. The gateways were the only interruption of the wall, and were single or double, without adhering to any definite regulation. In some instances all gates were double, as at Aalen, Buch, and Heidenheim, while at Urspring all gates were double except the porta decumana. At Unterböbingen the portae principales were double, while they were missing entirely in the small castella at Halheim and Freimühle. The via principalis, and consequently also the portae principales, were usually placed in the normal position nearer the porta praetoria, but occasionally the rule was not observed. At Buch, for example, the crossroad is in the center, and at Aalen it is placed nearer the porta decumana. The late forts had no portae praetoriae, since the so-called praetorium is lacking.

Inside the castellum the main building, commonly called the praetorium, occupied the dominant position. The official shrine of the soldiers was also placed in a prominent location.

The training-hall, or drill-hall, was usually larger than the main building. Other essential buildings, such as storerooms and armories, must have been constructed in every castellum. Some of the rooms were heated by hypocausts. Steps, at Eining, and cellars, as at Epfach, were undoubtedly in common use. Wells have been found in a number of castella; thus in the courtyard of the main buildings at Buch, and two in the courtyard of the same building at Heidenheim. At Buch and Gunzenhausen the soldiers built cisterns to insure a water supply. Springs furnished the water supply at Donnstetten, Gomadingen, and Isny. Schierenhof offers the most interesting remains of the water system. Lead pipes carried the water which was discharged through a stone on which a water nymph had been carved.

Special mention should be made of the bath, for it can be assumed that every castellum had its bath, equipped with all of the appointments, if at all possible, which the Roman was accustomed to find in the bath of his native land.⁴¹ Although a large number of baths have been found, no fixed rule can be formulated in regard to their location in relation to the castellum. They were, as a rule, conveniently situated, none in Raetia and Upper Germany being over two hundred meters from the camp; only five were over one hundred meters from the camp. None was nearer than twenty-five meters to the camp.

A list of all the known castella in Raetia follows:

1. Aalen was the largest ala castellum on the German-Raetian limes, where the ala II Flavia m. was stationed. It was situated on the Kocher about four kilometers from the limes, with its left side facing the enemy.⁴² It was constructed during the Trajan-Antoninus Pius period; took the place of Heidenheim (No. 27); and was abandoned with the limes at the time of Gallienus. The only inscriptional matter from Aalen is stamps on tegulae of the ala II Flavia m. and legio VIII Augusta.⁴³ The

⁴¹Georg Wolff, "Kastelle und Bäder im Limesgebiet," XI Bericht d. röm.-germ. Kom. (1920), pp. 76 ff.

⁴²Allen (p. 12, n. 10) has erroneously put the distance from the limes at 10 km. Cf. Hertlein and Gössler, II, 280-82; ORL, No. 66 (1904); K. Miller, Die röm. Kastelle in Württemberg (Stuttgart, 1892), p. 38. Hertlein and Gössler have excellent descriptions and maps of the castella in Württemberg. The British castella along the Roman wall are all much smaller, from 28,800 to 16,600 square meters (Allen, pp. 14-16).

⁴³Vollmer, Nos. 501, 498.

cohort castella of Schlierenhof (No. 50), Unterböbblingen (No. 55), and Buch (No. 8) were under its command. The bath and several residences have been found, but traces of a civil settlement still lie hidden. All gates were double. Dimensions: sides, 288 and 278 meters; ends, 215 meters. Area: 60,845 square meters, or 6.08 hectares. Thickness of walls: 1.7, 1.9, 212 meters.

2. Ad Rhenum, a late fort mentioned only in the Tabula Peutingeriana, has not yet been identified.

3. Aislingen was a link in the early chain of forts on the right side of the Danube from Claudius until it was abandoned in favor of Faimingen (No. 18) on the left side of the Danube by Domitian. No evidence has been found to prove that it was occupied by a military force in the late Roman period. A most interesting feature of Aislingen is the enormous amount of terra sigillata, and also a large number of coins, from the period of its occupation. No other Raetian castellum has been more prolific in surrendering buried treasure.⁴⁴

4. Arbon (Arbor Felix, Arbona), mentioned both in the Tabula Peutingeriana and the Itinerarium Antonina, was a late Roman castellum occupied by the coh. Herculia Pannoniorum, according to the Notitia Dignitatum.⁴⁵ The walls of the castellum are surmised under a medieval wall.

5. Augsburg (Damasia, Augusta, Augusta Vindelicum, Aelia Augusta, Municipium, Municipium Aellium Augustum). At Oberhausen, now a part of Augsburg, was a legionary camp for a short time during the reign of Augustus.

6. Böhmig, the last castellum of the limes before reaching the Danube, was established on the Altmühl by Hadrian. The fort was destroyed by the Marcomanni, and was then rebuilt in stone by a detachment of the legio III Italica from Regensburg and the coh. I Breucorum from Pfünz.⁴⁶ The castellum seems to have been aban-

⁴⁴ Most of the terra sigillata is from southern Gaul, more specifically from La Graufesenque, and hails primarily from the first half of the century. Knorr (Terra-Sigillata von Aislingen, pp. 47-67) lists 149 stamps, of which 21 are from La Graufesenque, and 29 certainly from southern Gaul. For further details, see also: Knorr, Töpfer u. Fabriken verz. Terra-Sigillata d. I. Jahr., pp. 130-32; F. Oswald and T. Pryce, Terra-Sigillata (London, 1920), pp. 78 f., 81-85, 169-72, 176-79, 181 f., 185, 187-89, 193, 211.

⁴⁵ Tab. Peut. 3. 5; Ant. p. 237, 251; Not. Dig., occ. XXXV. 34. Ammianus (31. 19. 20) also mentions Arbon.

⁴⁶ Vollmer, Nos. 290, 291.

done by Severus Alexander after the invasion of 233/4. Dimensions: circa ninety-five by seventy-seven meters. Area: approximately 7,315 square meters, or seven-tenths hectare.

7. Bregenz (Brecantia, Brigantia) harbored a castellum in the late Roman Empire.⁴⁷

8. Buch was a cohort castellum on the limes which appears at the time of Antoninus Pius in place of Oberdorf (No. 38), where the finds stop with Antoninus Pius.⁴⁸ It was situated twelve hundred meters from the limes and, like Aalen, presented its left side to the enemy. Excavations have produced a considerable volume of antiquities, including the bath, a Roman wall, and a large cache of over eight hundred spearpoints, of which about seven hundred were found in 1884. The fort was apparently abandoned with the invasion of 233/4, since the coins reach to Elagabalus. Dimensions: sides, 151 and 159.4 meters; ends, 139.5 meters. Area: 20,953 square meters, or 2.09 hectares.

9. Burladingen is the westernmost castellum on the Domitian limes, situated twenty-five kilometers from Gomadingen, the next castellum in the chain to the east. The cohort castellum was constructed about 85 A. D., and was abandoned by Trajan, about 110 to 115. Despite its short period of existence it had been rebuilt in stone. Dimensions: 137 by 140 meters. Area: 19,180 square meters, or 1.9 hectares.

10. Chur (Curia), the principal way-station between Como and Bregenz, was the site of a castellum in the late Roman period.⁴⁹

11. Confluentes ad Rhenum was the site where a numerus Barbaricariorum was stationed.⁵⁰ What place on the southeastern coast of Lake Constance is to be identified with this place, has not yet been determined.⁵¹

⁴⁷Not. Dig., occ. XXXV. 32. Cf. Anthes, X Bericht d. röm.-germ. Kom., p. 143.

⁴⁸ORL, No. 67 (1898); Hertlein and Gössler, pp. 282-84. The only inscriptional remain from Buch is the bronze letter "M" from the memorial tablet of the castellum.

⁴⁹Itin. Ant. 277. 6; 278. 4; Tab. Peut. 4. 1; Felix Stähelin, Die Schweiz in röm. Zeit (Basel, 1931), p. 566; Haug, "Raeti," P.-W., Vol. IA, cols. 52 f.

⁵⁰Not. Dig., occ. XXXV. 32.

⁵¹Reinecke ("Der Name des Römerkastells an der Illermündung," Germania, XV, 239) favors Rheinegg. Anthes (p. 144) would place it at St. Margaret, near the Hither Rhine. Then, too, Bregenz is also mentioned as the site. The closest one

12. Dambach, situated only one hundred meters from the limes, was created by Hadrian as a numerus castellum, but was later elevated to a cohort castellum. It was one of the castella which were subject to the ala castellum at Ruffenhofen (No. 49). It seems to have continued to serve till Gallienus.⁵² Dimensions: 137 by 115 meters. Area: 21,505 square meters, or 2.1 hectares.

13. Donnstetten, the old Clarennia,⁵³ was the third link in the Domitian limes, nineteen kilometers from Gomadingen at the west and twenty-four kilometers from Urspring to the east.⁵⁴ Hertlein suggests that it may have been an ala castellum.⁵⁵ The castellum continued in use till Antoninus Pius, if it was not abandoned earlier, when it was made obsolete by the establishment of a castellum at Schierenhof (No. 50). The castellum has not been found, although the bath has been identified.⁵⁶

14. Druisheim (Summuntorium, and the later Submuntorium) was one of those early forts of Claudius which in turn was abandoned by Domitian.⁵⁷ The earth fort and a pottery factory with an exceptionally rich find of remains have been found.⁵⁸ In the late Empire a division of the legio III Italica and the equites stabilesiani iuniores were stationed here.⁵⁹

can come to the facts is to say that the area near the end of Lake Constance was the site of this castellum.

⁵²Only fragments of inscriptions have come down to us, as Vollmer, Nos. 306, 306A; ORL, No. 69.

⁵³Knorr (Töpfer u. Fabriken verz. Terra-Sigillata J. I. Jahr., pp. 102-106) enters the lists with great detail in an effort to identify Donnstetten with the ancient Clarennia. Cf. Hertlein and Gbessler, pp. 234 f.

⁵⁴Knorr (Terra Sigillata von Geislingen, p. 35) ascribes its creation to Vespasian, but this is placing it too early. Cf. Barthel, VII Bericht d. röm.-germ. Kom., pp. 171 f.; Fabricius, P.-W., Vol. XIII, col. 607.

⁵⁵Hertlein, I, 40.

⁵⁶Owing to its peculiar long room measuring 32 by 3.15 m., the bath was considered a mansio ever since it was discovered in 1903/4. Even Hertlein (I, 40; II, 234) still considered it a mansio. For proof and map, see Paret, "Neues von Sumelocenna-Rottenburg," Germania, XV, 232 ff.

⁵⁷Itin. Ant. 250. It is misleading to associate this castellum with Donauwörth, as is sometimes done, since Donauwörth is rather remotely situated to the north. Burghöfe, near Druisheim, is a more plausible identification.

⁵⁸Drexel, "Bericht über d. Tätigkeit d. röm.-germ. Kom.," XV Bericht d. röm.-germ. Kom., p. 245; Vollmer, No. 508.

⁵⁹Not. Dig., occ. XXXV 18. 16.

15. Eining (Abusina), situated on the south bank of the Danube near the Abens, was a cohort castellum from the mid-Flavian period to the time of the Notitia Dignitatum. The building, remodeling, and rebuilding of the castellum, which were carried on for three centuries, have developed difficult problems.⁶⁰ Diocletian still felt the need of keeping up the castellum by building two towers.⁶¹ The cohors IV Gallorum was stationed here first.⁶² Then followed the cohors III Brittanorum, which continued there to the end of Roman rule.⁶³ The cohors I Breucorum also left a mark, but this is merely casual since the cohort had already been stationed at Pfünz.⁶⁴ Tegulae of the legio III Italica, cohors I Flavia Canathenorum m., and the local cohors III Brittanorum have been recovered.⁶⁵ Three diplomata are known to have been issued to soldiers who received their honorable discharge here.⁶⁶ Dimensions: 147 by 124 meters. Area: 18,375 square meters, or 1.8 hectares.

16. Emerkingen is another of the early castella, as Aislingen, which was placed on the right bank of the Danube and which held that line from Claudius to Domitian. Finds after this period are scarce. This is also borne out by the terra sigillata evidence.⁶⁷

17. Eschenz (Tasgaetium), near the Raetian boundary at the Rhine where it leaves Lake Constance, seems to have been occupied in the first century, and then again at the time of Diocletian.⁶⁸

⁶⁰For good accounts of the antiquities and detailed discussions of the problems, with charts, see K. Bopp, "Das Römerkastell in Eining," Beit. z. Anth. u. Urgeschichte Bayerns, XIV, 101-112; 135-37; and Reinecke, Röm. u. frühmittelalterliche Denkmäler vom Weinberg bei Eining an d. Donau (Mainz, 1927). Cf. Koepf, Germania Romana, I, 48, and plate XXII 3.

⁶¹Anthes, X Bericht d. röm.-germ. Kom., p. 146.

⁶²Vollmer, No. 332.

⁶³Vollmer, Nos. 334, 336, 338, 343A, 345, 346; Not. Dig., occ. XXXV. 25.

⁶⁴Vollmer, No. 333. ⁶⁵Vollmer, Nos. 496, 502, 506.

⁶⁶Vollmer, Nos. 512, 513, 514.

⁶⁷Fine pottery kilns have been uncovered, but no terra sigillata ware was manufactured here. See Burkhardt, "Emerkingen: Töpferöfen," Fund. a. Schwaben, XVIII (1910), 28 f. G. Burkhardt has a detailed description of the praetorium ("Emerkingen," ibid., XXI [1913], 45-50). Cf. Hertlein and Gössler, p. 203.

⁶⁸Stähelin, p. 572.

18. Faimingen, a cohort castellum, replaced Aislingen (No. 3) when the frontier was pushed beyond the Danube by Domitian.⁶⁹ Here it guarded the ford over the Danube at least to the time of Caracalla, who remodeled it completely in stone, after it had already been strengthened with stone walls after the war with the Marcomanni.⁷⁰ Later Oberdorf (No. 38) took its place on the frontier. Its position on the road from Cannstatt, Upper Germany, via Günzburg contributed to the importance of this position. The cult of Apollo Grannus was centered here. As in Aislingen, so here too a great amount of terra sigillata ware has been found, beginning with Vespasian and Domitian and continuing to the end of the second century.⁷¹ According to this evidence, Faimingen was most active in the middle of the second century. Dimensions: 241 by 250 meters. Area: 60,250 square meters, or six hectares.

19. Foetibus (Füssen) harbored a division of legio III Italica at the time of the Notitia Dignitatum, and is most probably to be identified with Füssen, on the Lech, due east of Lake Constance.⁷²

20. Freimühle is the site of the smallest castellum on the limes. It was placed about 750 meters from the limes and was situated about eleven hundred meters from Schierenhof. Its proximity to Schierenhof undoubtedly accounts for its small size. The well-preserved foundations and the bath have been excavated.⁷³ The castellum, in point of time, probably covers the same period as Buch, Schierenhof, and Aalen, that is, from Trajan-Antoninus Pius to Gallienus. Dimensions: fifty-five by fifty-two meters. Area: 2,860 square meters, or .28 hectare.

21. Geislingen, situated a little above Urspring, may have

⁶⁹Fabricius, P.-W., Vol. XIII, col. 611; ORL, No. 66C.

⁷⁰Hertlein, I, 146; Fabricius, P.-W., Vol. XIII, col. 611. The importance of its position at the ford may have been a determining factor in keeping the camp there beyond Caracalla.

⁷¹Oswald and Pryce, pp. 106, 108, 110, 114-17, 120-23, 125.

⁷²Not. Dig., occ. XXXV. 21; Anthes, X Bericht d. röm.-germ. Kom., p. 154.

⁷³Hertlein and Gössler, II, 286, where a good map is also available.

been a fort in the Domitian limes from Domitian to Trajan, that is, circa 90 to 112.⁷⁴

22. Gnotzheim (Medianis) was on the limes below Dambach and Gunzenhausen between the Altmühl and the Wörnitz. It was most probably established by Trajan, and continued at least to the time of Caracalla, though it may have been abandoned for some time in between.⁷⁵ It was a cohort castellum ranking beneath the ala castellum at Ruffenhofen (No. 49). Postholes seem to indicate that the fort was of wood.⁷⁶ Dimensions: 153 by 143 meters. Area: 21,879 square meters, or 2.1 hectares.

23. Gomadingen was the second station in the Domitian limes, located nineteen kilometers from Donnstetten, to the north-east, and twenty-five kilometers from Burladingen, to the south-west. Ceramics and coins all point to the same period of occupancy as that of the other three forts, namely, about 90 to about 115. The castellum has not yet been found.⁷⁷

24. Günzburg (Guntia), on the Günz at the Danube, was on the Danube end of the Cannstatt-Danube road. It was perhaps, like Aislingen, constructed by Claudius, although conclusive evidence for this is lacking. In 77/8 Vespasian built a fort there for an ala, according to the memorial tablet.⁷⁸ It was apparently evacuated when Heidenheim (No. 27) took its place at about 90. Ceramics begin with the time of Nero and continue to that of Antoninus Pius.⁷⁹ At the time of the Notitia Dignitatum a praefectus militum Ursariensium was stationed here.⁸⁰

25. Gunzenhausen, at the Altmühl and between Dambach and Theilenhofen, was a numerus castellum on the limes, which served

⁷⁴Knorr ("Terra Sigillata von Geislingen," Fund. a. Schwaben, XVIII (1910), 32, 35) argues that Geislingen played a role of considerable importance from 74 to 90. Cf. Knorr, "Terra Sigillata von Geislingen, Finningen und Heidenheim," ibid., N. F. III, 123, 126 f.

⁷⁵ORL, No. 70; Fabricius, P.-W., Vol. XIII, col. 608; Haug, ibid., Vol. IA, col. 57. Vollmer (Nos. 308, 309, 310, 310A) lists four fragments of inscriptions from the castellum at the time of Caracalla.

⁷⁶"Fundchronik," Germania, XIV, 233; H. Eidam, "Fundchronik," ibid., XV, 97.

⁷⁷Hertlein and Gössler, II, 232 f.

⁷⁸Vollmer, No. 196.

⁷⁹Oswald and Pryce, pp. 81, 110 f., 114, 118.

⁸⁰Not. Dig., occ. XXV. 20.

as an advance post to the regular castella.⁸¹ Postholes show that it, like Gnotzheim, was constructed of wood.⁸² It was perhaps built by Hadrian or Antoninus Pius, and may have continued to Gallienus. Dimensions: circa eighty-six by eighty meters. Area: circa 6,880 square meters, or six-tenths hectare.

26. Halheim, on the limes between Buch and Ruffenhofen, at the headwaters of the Jagst, which swings in a curve to leave Raetia near Buch, was situated closer to the limes than any other limes castellum, namely, at a distance of forty meters.⁸³ The ruins are today quite pretentious since it is one of the best-preserved of the castella on the limes. It was constructed by Antoninus Pius, or possibly Hadrian, and continued in service till the invasion of 233/4, or later. A coin of Gordian III seems to show that the small castellum remained in service till Gallienus. It was almost square, measuring eighty-two meters on three sides, while the north side was eighty meters. Area: circa 6,642 square meters, or .66 hectares.

27. Heidenheim (Aquileia) was the last castellum of the Domitian limes, situated on the Brenz twenty-four kilometers from Urspring.⁸⁴ Domitian built it shortly after 90, apparently to take the place of Günzburg (No. 24). Heidenheim, in turn, was evacuated when Aalen (No. 1) was fortified during the time of Trajan-Antoninus Pius. The ala II Flavia p. f. m. was quartered here. Dimensions: 271 by 195 meters. Area: 52,845 square meters, or 5.28 hectares.

28. "Illermündung" (Febiana). Compare with No. 56, Unterkirchberg (Viana). There must have been a fort at or near the confluence of the Iller and the Danube in the first century prior to the Domitian limes to fill in the gap between Günzburg and Risstissen.⁸⁵ The Notitia Dignitatum places the equites stabiles—

⁸¹ ORL, No. 71; Fabricius, P.-W., Vol. XIII, col. 610.

⁸² Eidam, Germania, XV, 97.

⁸³ ORL, No. 67A; Hertlein and Güssler, II, 299 f.

⁸⁴ ORL, No. 66B; Hertlein and Güssler, II, 247 ff.; Haug and Sixt, Die röm. Inschriften u. Bildwerke Württembergs (Stuttgart, 1914), pp. 82, 89-94.

⁸⁵ Reinecke (Germania, XV, 236-44) has called attention to the fact that the road system and the fact that Urspring (No. 57) must have had a predecessor on the Danube make it necessary to assume a castellum here. See also Hertlein, I, 166; Anthes, X Bericht d. röm.-germ. Kom., pp. 150 f.

ani iuniores here.

29. Isny (Vemania), Bettmauer at Burkwang near Isny, at the Argen on the Bregenz-Kempten road, was a castellum in the late Roman period and was occupied by a division of the legio III Italica and a praefectus alae II Valeriae Sequanorum.⁸⁶ The coins begin just before Gallienus, circa 250, and end with Valens in the third quarter of the fourth century. The camp, an irregular pentagon which followed the contour of the land very closely, was excavated by Bersu and Gössler in 1926. Dimensions of sides: fifty-one, forty-seven, thirty-three, twenty-three, eighty-three meters. Area: approximately three thousand square meters, or three-tenths hectare.

30. Kellmünz (Caelius Mons), at the Iller, is another late Roman castellum, which was occupied by a tribunus cohortis III Herculeae Pannoniorum.⁸⁷ The castellum was very irregularly shaped, with at least seven sides, but roughly forming a square. The east front, about one hundred meters long, was constructed with a wall 3.7 meters thick and six heavy semicircular abutments. Area: circa 6,400 square meters, or circa six-tenths hectare.

31. Kempten (Cambodunum), on the Iller at an important position of the Roman road system, was a late Roman castellum occupied by a division of the legio III Italica.⁸⁸

32. Kösching (Germanicum), an ala castellum of the limes north of the Danube, near Ingolstadt, dates from the mid-Flavian period, when the line of defense was pushed north of the Danube, as an inscription of 80 A. D. testifies.⁸⁹ Vespasian seems to have established the castellum here, possibly to take the place of Oberstimm (No. 39), south of the Danube. Kösching, Pförring, both ala castella, and Pfünz are far behind the limes, Kösching being thirteen kilometers from the limes, and the other two, nine kilometers. The cohort castellum at Pfünz (No. 43) was under its command. The ala I Flavia c. R. was stationed here. The castellum

⁸⁶ Hertlein and Gössler, pp. 191 f.; Anthes, X Bericht d. röm.-germ. Kom., p. 144. For troops stationed here, Not. Dig., occ. XXXV. 19, 33. For outline of camp, see Miller, p. 45, and Anthes, loc. cit.

⁸⁷ Anthes, X Bericht d. röm.-germ. Kom., pp. 145 f.; Not. Dig., occ. XXXV. 30.

⁸⁸ Not. Dig., occ. XXXV, 19.

⁸⁹ Vollmer, No. 257; ORL, No. 74.

remained in service till Gallienus, or 259/60.⁹⁰ Dimensions: circa 216 by 197 meters. Area: circa 42,552 square meters, or 4.25 hectares.

33. Künzing (Quintana), on the Danube between Straubing and Passau, was established in the first century, possibly in the reign of Claudius, and not later than Vespasian, when the Romans fortified the Danube from Regensburg to Passau.⁹¹ Destroyed by the Marcomanni, it was rebuilt in stone, and was occupied till Gallienus, or 259/60. The cohorts V. Bracaraugustanorum and the cohorts III Thracum c. R. were quartered there in the early period, while the Notitia Dignitatum places a praefectus I Flaviae Ractorum here for the late period.⁹² An "R" from the inscription of the main building is all that has come down to us.⁹³ Dimensions: 136 by 166 meters. Area: 22,576 square meters, or 2.25 hectares.

34. Lautlingen, on the divide between the Danube and the Neckar, was the site of a castellum on the Alb line in the first century, and was evacuated by the time of Domitian.⁹⁴

35. Manching, on the Paar near Oberstimm, was most probably the ancient Vallatum, where a division of the legio III Italica and the ala II Valeria Singularis were quartered in the late Empire.⁹⁵

36. Mengen-Ennetach, at the Danube north of Lake Constance, was the site of a castellum in the early Flavian period.⁹⁶ This was the westernmost post on the right bank of the Danube.

37. Munningen (Losodica), on the Wörnitz, was perhaps a cohort castellum established by Trajan or Domitian, and was held

⁹⁰Reinecke (Germania, XVIII, 135 f.) and Witz ("Fund-chronik," ibid., pp. 139 f.) reported on the cache of coins found here by chance in a chicken house in 1933. Although the coins were not so numerous after 233/4, they show that the castellum was still in Roman hands till Gallienus.

⁹¹Reinecke, "Neue Funde aus d. rät. Grenzkastell Quintana," ibid., XIV, 2-11; "Ein neues Kastell an d. rät. Donaugrenze," ibid., p. 200.

⁹²Not. Dig., occ. XXXV. 10. ⁹³Vollmer, No. 430.

⁹⁴Hertlein and Gössler, II, 215; Drexel, XV Bericht d. röm.-germ. Kom., p. 245.

⁹⁵Not. Dig., occ. XXXV. 17. 26; Anthes, X Bericht d. röm.-germ. Kom., p. 149.

⁹⁶Hertlein, I, 21; Knorr, "Terrasigillata von Unterkirchberg-Viana," Germania, XIII, 7 ff.

as a fort till it was replaced by Ruffenhofen (No. 49) on the limes under Antoninus Pius.⁹⁷

38. Oberdorf (Opie), near Bopfingen at the Eger, was a link in the Domitian limes, taking the place of Faimingen (No. 18) on the Danube, and was occupied till it was replaced by Buch (No. 8) either under Trajan, or more probably under Antoninus Pius, with whose reign the finds end.⁹⁸ Dimensions: 118, 153, 137, 162 meters. Area: circa 19,300 square meters, or circa 1.9 hectares.

39. Oberstimm, near Manching at the Paar and near the Danube, is certainly pre-Vespasian, although it is impossible to say whether it was occupied by Claudius with the western castella south of the Danube or whether it was occupied at a later time, possibly at about the same time as Eining (No. 15).⁹⁹ It seems to have been evacuated when Kösching was fortified, possibly by Vespasian. An ala was stationed here, and the cohors III Thracum has left tegulae.¹⁰⁰

40. Parrodunum, the castellum of the cohors prima Herculeae Raetorum in the late Empire,¹⁰¹ was located between Drulsheim and Oberstimm on the south side of the Danube, and must therefore have been situated near Stätteberg.¹⁰²

41. Passau (Batava), situated in the extreme northeast corner of Raetia on the Inn and the Danube, was established as a cohort castellum in the first century, possibly as Künzing, by Vespasian, or before, and continued as a castellum till late Roman times. The cohors IX Batavorum was stationed here throughout the period, one of two auxiliary units to continue at their original locations to the end of Roman occupation (the cohors III

⁹⁷Fabricius, P.-W., Vol. XIII, cols. 610 f.; Haug, ibid., Vol. IA, cols. 51 f.

⁹⁸ORL, No. 67B (1915); Hertlein and Güssler, II, 250 f.

⁹⁹Hertlein, I, 23; Barthel, VI Bericht d. röm.-germ. Kom., p. 161.¹⁰⁰

¹⁰⁰Ala: Vollmer, No. 256AB. For tegulae: Reinecke, Germania, XIV, 88. This may be a trace of the coh. III Thracum veterana.

¹⁰¹Not. Dig., occ. XXV. 15.

¹⁰²Anthes, X Bericht d. röm.-germ. Kom., p. 152; Reinecke, Germania, XV, 240. Hertlein (I, 167) places it at Steppberg, on the north side of the Danube, but the castellum, in conformity with the location of the other late castella, was undoubtedly on this side of the Danube, possibly near Stätteberg.

Britannorum at Eining was the other unit).¹⁰³ The Notitia Dignitatum also places a castellum at Bolodurum, in Noricum, on the Danube just across the Inn.¹⁰⁴

42. Pförring (Celeusum) was an ala castellum at the Danube between Kösching and Eining, established in the mid-Flavian period, probably by Vespasian, with the command over the cohort castellum at Eining (No. 15).¹⁰⁵ It remained occupied till the end of the limes, 259/60. The ala I Singularium c. R. p. f. was quartered here, though the ala I Hispanorum Auriana of Weissenburg, and the cohors I Flavia Canathenorum m. of Straubing have left traces here.¹⁰⁶ The castellum faced the enemy and was situated nine kilometers behind the limes, and, like Kösching, which was also far behind the limes, it had no castellum before it on the limes. Dimensions: circa 193 by 200 meters. Area: circa 38,600 square meters, or 3.8 hectares.

43. Pfünz (Vetoniana), a cohort castellum on the Altmühl, subject to the ala castellum at Kösching (No. 32), was established at about the same time as Kösching and Pförring, that is, mid-Flavian, probably by Vespasian.¹⁰⁷ The cohors I Breucorum c. R. was quartered here. There are also remains of a turma.¹⁰⁸ Building operations were carried on in 183/4.¹⁰⁹ Severus Alexander evacuated Pfünz and Böhming at the same time. Of the trans-Danubian castella, Pfünz has surrendered the greatest volume of terra sigillata ware, which begins with the Flavians and ends in the early third century, with the greater mass falling into the period from Trajan to Antoninus Pius.¹¹⁰ As at Pförring, the castellum faced the enemy and was situated nine kilometers from the limes. Dimensions: circa 188 by 145 meters. Area: circa 27,260 square meters, or circa 2.7 hectares.

44. Pfyn (Ad Fines), at the Thur in Thurgau near the western border south of Lake Constance, was a late Roman castellum.¹¹¹

¹⁰³Not. Dig., occ. XXXV. 24. ¹⁰⁴Ibid., 44.

¹⁰⁵ORL, No. 75.

¹⁰⁶Ala I Hispanorum Auriana, Vollmer, No. 264; cohors I Flavia Canathenorum m., Vollmer, No. 502.

¹⁰⁷ORL, No. 73. ¹⁰⁸Vollmer, Nos. 287, 288, 289C.

¹⁰⁹Vollmer, No. 279.

¹¹⁰Oswald and Pryce, pp. 106, 108-111; 113 f., 117 f., 121-23, 187, 193, 197, 201, 203, 212, 214, 224.

¹¹¹Stähelin, p. 553; Anthes, X Bericht d. röm.-germ. Kom., p. 143.

45. Piniana was the site of a castellum occupied by the V. Valeria Phrygum at the time of the Notitia Dignitatum in the late Empire.¹¹² Its location is not certain, although the chances are that it was near Faimingen.¹¹³

46. Pons Aeni, at or near Pfaffenhofen or Rosenheim on the Inn, was the site of a late Roman castellum.¹¹⁴

47. Regensburg (Regina castra, Regina, Legio, Rataspona, Ratisbona), on the Danube opposite the Regen, an excellent position for defense, was fortified in the first century, most probably when the Danube castella from here on eastward were established; that is, by Vespasian or earlier by Claudius, who was not apt to overlook such an advantageous position.¹¹⁵ The cohors II Aquitanorum was stationed here before the coming of the legion. The legionary camp was completed in 179/80 and occupied shortly afterward by the only Raetian legion, the legio III Italica.¹¹⁶ The legion remained here continuously for a hundred years, and this is the only camp known to us. It was remodeled and enlarged till in the course of time an area of about 235,400 square meters, measuring about 440 by 535 meters, was surrounded with walls and turrets of heavy stone.¹¹⁷ In addition to the legion and cohort mentioned above, tegulae have been found of the legio I Minervia, Legio IIII Macedonica, ala I Singularium c. R., and cohors I Flavia Canathenorum m.¹¹⁸ The dearth of terra sigillata is striking. In the late Empire a detachment of the legion was still

¹¹²Not. Dig., occ. XXXV. 16.

¹¹³Reinecke, Germania, XV, 240 f.; Hertlein, I, 167.

¹¹⁴Anthes, X Bericht d. röm.-germ. Kom., p. 154; Not. Dig., occ. XXXV. 2.

¹¹⁵Finda (Steinmetz, "Fundchronik," Germania, XVII, 296) point to a time before Vespasian, strengthening the view that Claudius tightened the Roman grip on the frontier here. See also Reinecke, Germania, XIV, 8; Hertlein, I, 23.

¹¹⁶Vollmer, No. 362.

¹¹⁷Hugo Graf v. Walderdorf, Regensburg (1896), 4th ed., pp. 3 ff. Heinrich Lamprecht ("Der grosse röm. Friedhof in Regensburg," Verh. d. hist. Ver. von Oberpfalz u. Regensburg, 1906) has treated the three Roman cemeteries, arriving at the conclusion that all three begin to be used with the legion. V. Walderdorff (Die Römerbauten an d. Königsberge bei Regensburg [Regensburg, 1898]) discusses finds of tegulae and weapons from a building which seems to have been connected with the legion. Vollmer's inscriptions from Regensburg run from 350 to 425B. For picture of tower, see Drexel, Germania Romana, II, 13, plate XIX 1.

¹¹⁸Vollmer, Nos. 497, 500, 502.

here, although it did not hold the command of the five units into which the legion had been split.¹¹⁹

48. Risstissen, situated on the Riss at the Danube between Emerkingen and the "Illermündung" (Febiana), like Aislingen in this line, was certainly built by Claudius, according to all evidence.¹²⁰ It was undoubtedly evacuated by Domitian, since his new line of castella put an end to its usefulness. This cohort castellum, as at Unterkirchberg (Viana), had two camps, both of earth; one by Claudius, measuring circa 110 by 152.5 meters, with an area of circa 16,775 square meters, or 1.67 hectares; the other by Vespasian, measuring about 117.5 by 162.5 meters, or 19,094 square meters, or 1.9 hectares.

49. Ruffenhofen, a limes castellum on the Wörnitz between Halheim and Dambach, quartered an ala, very probably the ala I Flavia Gemelliana, when Antoninus Pius created a castellum here to take the place of Munningen (No. 37).¹²¹ It was placed 2,100 meters behind the limes, and included the two cohort castella at Dambach (No. 12) and Gnotzheim (No. 22) in its district. It possibly continued to Gallienus. Dimensions: circa 197 by 190 meters. Area: circa 37,430 square meters, or circa 3.7 hectares.

50. Schierenhof, a cohort castellum of the limes subject to the ala castellum at Aalen (No. 1), was situated in the extreme northwest corner of Raetia.¹²² It was established by Antoninus Pius, and took the place of Donnstetten (No. 13), provided Donnstetten was still fortified at the time. It perhaps remained occupied till Gallienus, at least till Severus Alexander. The castellum was located fourteen hundred meters from the limes and faced the enemy. The cohors I Raetorum was stationed here and left tegulae.¹²³ Dimensions: 130.6 by 157 meters. Area: 20,504 square meters, or 2.05 hectares.

51. Steinkirchen, on the eastern Danube frontier, twenty

¹¹⁹Not. Dig., occ. XXXV. 17; Anthes, X Bericht d. röm.-germ. Kom., pp. 146-49.

¹²⁰Hertlein and Gössler, II, 205 f.; Gössler, "Museographie," VII Bericht d. röm.-germ. Kom., pp. 80, 110 f.; Haug and Sixt, pp. 50 ff., 680.

¹²¹ORL, No. 68.

¹²²Ibid., No. 64; Hertlein and Gössler, II, 275 ff.; Haug and Sixt, pp. 128-33; Miller, pp. 32 f.

¹²³Vollmer, No. 505.

kilometers from Straubing and twenty-four kilometers from Künzing, was the site of a small castellum.¹²⁴ The time of construction cannot be determined, but it dates from at least the beginning of the second century, if not earlier. Only a few letters from the inscription and portions of the walls have survived. It seems to have continued to Gallienus, or 259/60. Area: circa .44 hectare.

52. Straubing (Sorviodurum), situated at a sharp bend of the Danube between Regensburg and Steinkirchen, was the site of a cohort castellum. The camp was situated at Ostenfeld in the eastern section of modern Straubing. The cohors I Flavia Canathenorum and the cohors II Raetorum were quartered here. These cohorts and the legio III Italica have also left tegulae.¹²⁵ Like the other eastern Danube castella, it was established by Vespasian or earlier, and seems to have continued to Gallienus.

53. Teriolis was the site of a late Roman castellum in the interior of Raetia at Zirl on the Inn west of Innsbruck.¹²⁶ A detachment of the legio III Italica served here.¹²⁷

54. Theilenhofen (Iciniaum), on the limes between Gunzenhausen and Harlach, was the site of a cohort castellum subject to the ala castellum at Weissenburg (No. 59).¹²⁸ The camp faced the enemy and was situated 2,200 meters behind the limes. It was constructed by Trajan or Hadrian and served, as far as we can tell, till Gallienus. The cohors III Bracaraugustanorum most probably was quartered here, according to tegulae.¹²⁹ Dimensions: 196 by 140 meters. Area: 27,440 square meters, or 2.7 hectares.

55. Unterböbingen, on the limes near the headwaters of the Rems, and situated between Freimühle and Aalen, was a cohort castellum subject to the castellum at Aalen (No. 1).¹³⁰ The castellum was apparently established by Antoninus Pius to take the place of

¹²⁴Reinecke, "Ein neues Kastell an d. rät. Donaugrenze," Germania, XIV, 197-205.

¹²⁵Vollmer, Nos. 496, 502, 504; Dragendorff and Krüger, "Museographie," V. Bericht d. röm.-germ. Kom., p. 41; Barthel, VI Bericht d. röm.-germ. Kom., p. 165.

¹²⁶Anthes, X Bericht d. röm.-germ. Kom., p. 154.

¹²⁷Not. Dig., occ. XXXV. 22.

¹²⁸ORL, No. 71A.

¹²⁹Vollmer, No. 506A.

¹³⁰ORL, No. 65; Hertlein and Gössler, II, 278 f. Only the letter "I" has survived from the inscription on the castellum (Vollmer, No. 300).

Urspring (No. 57), and most likely continued to the end of the limes in 259/60. The castellum faced the enemy and was placed one thousand meters behind the limes. Dimensions: 135 by 148 meters. Area: 19,980 square meters, or 1.99 hectares.

56. Unterkirchberg (Viana), was the site of a first century castellum at the confluence of the Iller and the Danube (see No. 28, "Illermündung"). This castellum, excavated in 1927/8, was constructed by Claudius, according to the antiquities and terra sigillata ware.¹³¹ Then, after it had been destroyed by the Suebi, Vespasian rebuilt it. It was abandoned perhaps by Domitian.

57. Urspring (Ad Lunam), on the Lone was a link in the Domitian chain of forts, twenty-four kilometers from its neighbors, Donnstetten to the west and Heidenheim to the southeast.¹³² The cohort castellum took the place of Unterkirchberg (No. 56), and continued till Antoninus Pius pushed the limes to Unterböbingen (No. 55). The site is known today as the Ringacker, on account of the outline made by the walls which are distinctly visible. The cohort castellum was placed on steeply sloping ground, facing the road rather than the enemy. First built of earth, it was later reconstructed in stone. Dimensions: 135 by 132.5 meters. Area: 17,887.5 square meters, or 1.78 hectares.

58. Venaxamodurum, an unknown locality, was the castellum of the cohors VI Valeria Raetorum at the time of the Notitia Dignitatum in the late Empire.¹³³

59. Weissenburg (Biriciana), an ala castellum of the limes on the Rezat, was situated six kilometers behind the limes with the cohort castellum Theilénhofen (No. 54) under its command.¹³⁴ The camp had its back turned to the enemy. It was

¹³¹W. Veeck, "Das Donau-Illerkastell Unterkirchberg," Germania, XIII, 1-6; Hertlein and Gßssler, II, 207-209; Knorr, "Terrasigillata von Unterkirchberg-Viana," Germania, XIII, 7-19; Hertlein, II, 22; Paret, III, 386.

¹³²ORL, No. 66A; Hertlein and Gßssler, II, 238-40; Koepp, Germania Romana, I, 37-39, and plate XIII; Miller, pp. 41-44.

¹³³Hertlein, I, 168. Reinecke (Germania, XV, 242 ff.) suggested that Venaxamodurum and Sorviodurum are identical, therefore at Straubing.

¹³⁴ORL, No. 72.

founded by Trajan, or possibly earlier.¹³⁵ The fort was probably not evacuated till the collapse of the limes in 259/60. The ala I Hispanorum Auriana, whose tegulae have been found here, and the cohort IX Batavorum were quartered here, but not simultaneously.¹³⁶ Dimensions: 174 by 179 meters. Area: 31,146 square meters, or 3.1 hectares.

Though this list of castella does not perhaps include all Roman forts, it is reasonably complete. In addition to these, two first century castella may be sought at Stockstadt and at Septimiacum, which was situated near Wössingen.¹³⁷ At Inzighofen, near Sigmaringen on the Danube at the western boundary, may be the site of the second legionary camp of Augustus, the other being known at Oberhausen in Augsburg.¹³⁸ Other possible sites for the late Roman period are Laiz and particularly Neuburg on the Danube between Drülsheim and Oberstimm.¹³⁹ The Notitia Dignitatum also associates a division of the legio III Italica with Cassiliacum, which may be identified with Memmingen, between Kellmünz and Kempten.¹⁴⁰

In addition to the type of forts discussed so far there were unpretentious defenses known as burgi. These diminutive fortresses were scattered about in large numbers, but all traces of the vast majority have been obliterated completely. Finningen, situated near the Danube and the Iller, south of Ulm, was a late Roman burgus, and not a castellum.¹⁴¹ The evidence of the terra sigillata of the first century warrants no conclusion in favor of a fort for that time.¹⁴² Hörbranz was the site of another late Roman burgus, near the Bregenz-Eschenweil road, upon an elevation

¹³⁵ The terra sigillata finds also support Trajan (Oswald and Pryce, pp. 1-6, 110). Domitian has been mentioned, but it is difficult to fit this into his program of activities for the legion.

¹³⁶ Vollmer, Nos. 312, 314, 499. Cf. ORL, Nos. 72, 26, 45; Ernst Stein, Kaiserlichen Beamten (Wien, 1932), pp. 124, 168.

¹³⁷ Barthel, "Museographie," VII Bericht d. röm.-germ. Kom., p. 32; Fabricius, P.-W., Vol. XIII, col. 609.

¹³⁸ Barthel, VII Bericht d. röm.-germ. Kom., p. 132.

¹³⁹ Hertlein, I, 21; Anthes, X Bericht d. röm.-germ. Kom., p. 152.

¹⁴⁰ Not. Dig., occ. XXXV. 19.

¹⁴¹ Anthes, X Bericht d. röm.-germ. Kom., p. 151.

¹⁴² Knorr (Fund. a. Schwaben, N. F. III, pp. 126 f.) goes too far in his claim. Cf. Hertlein, I, 23.

which controlled the Rhine valley, Lake Constance, and the Laiblach valley.¹⁴³ Its dimensions were twelve by twelve meters, an area of 144 square meters, or .014 hectare. Other quite definitely fixed sites include Achegg and Aheggmühle, on the Rothbach near the divide of the Rhine and the Danube; Nellenbruck, on the boundary between Bavaria and Württemberg; Stielings, on the road from Kempten to the mouth of the Iller; Strass, on the boundary road; and Meckatz at Lindau.¹⁴⁴

The Roads

The roads in Raetia were of special significance to the Romans, for, as Mommsen has pointed out, one of the chief aims of the conquest was to secure the lines of communication with the north.¹⁴⁵ Thus the military motive made a good system of roads imperative. Those emperors who pursued a vigorous frontier policy were the great road-builders in Raetia, beginning with Augustus, the father of the Raetian roads. On the other hand, the province could not have flourished economically if it had not enjoyed the advantages which the roads provided for the development of industry and commerce. Thus the roads not only served the army and the civil administration of the province, but also stimulated the industrial and commercial enterprises of the province.¹⁴⁶ But it must be remembered that in Raetia the military considerations always were of paramount importance, regardless of the private interests. This fact stands out more clearly when we recall that

¹⁴³ Adolf Hild, "Spätröm.-rät. Grenzburgus zu Hörbranz, Vorarlberg," Germania, XVI, 292-94.

¹⁴⁴ Reinecke ("Neue Burgi an d. spätröm. Grenze Rätians," ibid., XIX, pp. 32 ff.) has published the results of the most recent study of the late burgi in Raetia.

¹⁴⁵ Mommsen, Roman Provinces, I, 19.

¹⁴⁶ Nissen (Italische Landeskunde, II, 55, quoted by Joseph Hagen, Römerstrassen der Rheinprovinz [Bonn, 1931], p. 1) has tersely stated the relationship between the official and private interests in the roads as follows: "Militärischen und politischen Erwägungen verdankt das römische Strassennetz seinen Ursprung, wirtschaftlichen Erwägungen seine dauernde Erweiterung und vervollkommnung. Die Steinwege sichern in erster Linie dem Beamten und Soldaten rasches Fortkommen, leisten aber auch dem bürgerlichen Verkehre noch grössere Dienste." See also G. H. Stevenson in Cambridge Ancient History (Cambridge, 1934), X, 217. A discussion of industry and commerce in Raetia will be found in the next chapter.

the roads of Raetia were not an independent network of highways, but were a link in a highway system which embraced not only this province but connected it with neighboring provinces and Italy.

The building of roads was again distinctly the work of the soldier, work from which even the veterans enjoyed no exemption.¹⁴⁷ And the Roman soldier built well--not for a day, but for centuries of hard wear.¹⁴⁸ The result is that these roads not only met the needs of the Romans, but continued in service after Rome's glory had grown dim and disappeared. In many instances the old Roman roadbeds can be followed for considerable distances today, and many of the main arteries still pursue the same course which the Romans had selected.¹⁴⁹ Since many of these lines of communication were in use even before Rome entered this territory, some of the routes have been in continuous service from early pre-Roman times.

The system of highways in Raetia has been the object of concentrated study by experts for some time.¹⁵⁰ Consequently this

¹⁴⁷Ulpian in Dig. xlix. 18. 4. Cf. W. Harster, Bauten d. röm. Soldaten z. öff. Nutzen (Speier, 1873), p. 11.

¹⁴⁸Franz Cumont (Comment l. Belg. fut romanisée [Brussels, 1919], p. 13) puts it thus: "L'Empire, qui croyait à son éternité, a construit ses routes pour l'infinité des siècles."

¹⁴⁹E. E. Hudemann (Geschichte des röm. Postwesens [Berlin, 1878], p. 49): "So bestand der römische cursus publicus auch nach dem Untergange der Merowinger fast unverändert fort, mit allen Lasten und Verpflichtungen für die Unterthanen, d. h. die unterworfenen Römer, mit seinen Freibriefen für königliche Beamte und Gesandte, ja die alten römischen Bennennungen veredi, paraveredi, evectio und manche andere haben noch im 9. Jahrhundert nach Christi ihre volle Bedeutung." H. Arnold ("Das röm. Heer im bay. Rätien," Beit. z. Anth. u. Urg. Bayerns, XIV, 76): "Es ist daher erklärlich, dass unser modernes Strassennetz in sehr vielen seiner Linien und Maschen auf dem altüberkommenen römischen basirt, ja viele unserer heutigen Strassen, und swar gerade der Haupt-Chausseen, liegen direkt auf dem römischen Strassen-körper." Nissen (quoted by Ludwig Friedländer, Sittengeschichte [Leipzig, 1919-21], I, 323) is of the opinion that the Alpine Routes were not so free and accessible to trade until the end of the eighteenth century as they had been in Roman times.

¹⁵⁰For bibliographies, see Hertlein and Gössler, II, xii-xvii; Haug, P.-W., Vol. IA, col. 56; Fabricius, P.-W., Vol. XIII, col. 615. For bibliography on Alpine routes, see Liebenam, Städteverwaltung im röm. Kaiserreiche (Leipzig, 1900), p. 443, n. 2; Walter Woodburn Hyde, Roman Alpine Routes (Philadelphia, 1935), pp. xv f. This is the most recent and most thoroughgoing account of the passes known to the Romans. For historiographical notes, see Hertlein and Gössler, II, xix-xxvii; Haug and Sixt, pp. 1-18; K. Schumacher, "Die Erforschung des röm.- u. vorröm. Strassennetzes in Westdeutschland," III Bericht d. röm.-germ. Kom., pp. 11-13.

phase of Roman activity in the province has been cleared up considerably. This is particularly true of the northern part of Raetia, while the part included in modern Switzerland is still awaiting careful study. Diverse and prolific sources have greatly facilitated the study of the roads.

Foremost among the written sources are the ancient itineraries and numerous milestones. The Itinerarium Antonini, the most reliable of the Roman roadmaps, is the most ancient, dating from the time of Diocletian at the end of the third century, and reflects the situation as it was before the abandonment of the limes in 259/60.¹⁵¹ The Tabula Peutingeriana describes the road system after 267-70, although it was composed at circa 360, or later. The Itinerarium Burdigalense, of 333, is of little value for our study.

The milestones hail from many sections of Raetia, especially from the area south of the Danube and the eastern part of the limes area above the Danube.¹⁵² Some milestones were found on the Raetian limes, while the German limes has yielded none. There are two from Claudius in the first century; and two from Julian in the middle of the fourth century; but the largest number date from the late second and early third centuries. Out of some thirty milestones on which the name of the emperor is legible, sixteen were placed by Septimius Severus. Distances were recorded from Augsburg, the capital, in all directions and also into the far south; from Bregenz to the east; from Regensburg, after the legion was established there, to the west; and from Kempten, on the Augsburg-Bregenz road.¹⁵³ With only few exceptions, all distances in Raetia are given in Roman miles.¹⁵⁴ The Gallic leuga was used westward from Pfyn, which was situated close to the western boundary of Raetia.

In addition to these sources which bear inscriptions, there is a multitude of evidence provided in other sources. The

¹⁵¹Haug, P.-W., Vol. IA, col. 58.

¹⁵²Vollmer, Nos. 450-495.

¹⁵³Augsburg: Vollmer, Nos. 454, 456, 457, 458, 459, 461, 471, 472, 476, 477; Bregenz: Nos. 453, 455; Regensburg (a le-gione): Nos. 485, 488, 490; Kempten: No. 470.

¹⁵⁴Stähelin, p. 347. North of Lake Constance, the Roman mile was used on a milestone from Köngen on the Neckar (Vollmer, No. 493). For a detailed discussion on the use of the Gallic leuga on Roman milestones in this area, see Stähelin, pp. 126-28.

cities and stations along the highways throbbed with life. We gain a vivid impression from the remains of official and private buildings, such as mansiones, mutationes, vici, popinae, cauponae, tabernae cauponae, and stabulae. Here also were the focal points of religious life, such as the cults of the beneficarii, Genius Stationis or loci, Epona, Biviae, Triviae, Quadriviae. Coins have also been found in large numbers along the highways.

When the Roman civil engineer surveyed a new site or followed the course of an old road, as he frequently did, he endeavored to take advantage of every natural feature. Thus he usually selected the sunny side in the mountains, and in a more level terrain followed the divide. In low places artificial embankments were thrown up, many of which can be traced today for kilometers at a time.¹⁵⁵ Streams were crossed by means of fords, or bridges were constructed. The grades in the mountains, especially in the Alps, were much steeper then than now, thus reducing the distance between two points considerably, but impeding traffic in perhaps a greater degree.¹⁵⁶ The pavement was solidly built in the prescribed Roman manner, wherever possible, but in swampy places the ingenuity of the engineer had to devise some scheme of providing a firm foundation. The corduroy road (Prügelweg) on the Augsburg-Brenner route shows how the Romans met these problems by supporting the roadbed with tree trunks.¹⁵⁷ The width of the pavement was about 5.3 to 5.5 meters, except on the Alpine routes, where the customary width was two to 3.5 meters, or less.¹⁵⁸

¹⁵⁵ An interesting find at Pfünz was a Roman groma. Only one other specimen has ever been found--at Pompeii. This surveyor's instrument was undoubtedly employed for the construction of roads in northern Raetia. Hertlein (I, 111) points out that with its use the Romans constructed the Upper German limes so accurately from Welzheim to Walldürn that a checkup by modern surveyors found a variation of only one meter in a straight line of 80 kilometers in length.

¹⁵⁶ Friedländer, I, 323. The ascent at the Maloja pass (1811 m.) was made in three curves; a later Roman road had nine curves. The modern highway for the same ascent curves 22 times.

¹⁵⁷ Reinecke, "Ein röm. Prügelweg im Eschenloher Moor," Germania, XIX, 58. The trunks as thick as an arm were cut in about 4-1/2 meter lengths. These were held in position with stakes, and then gravel was spread over this to a thickness of about 30 cm. This type of construction has been traced for about 5.5 km., and is now about 2 m. below the surface.

¹⁵⁸ Hertlein and Gössler, II, 199-209: 5.4 m.; pp. 225-240: 5.3 m.; pp. 240-54: 5.5 to 5.6 m.; pp. 266-72: 5.2 m. For the Alps, Friedländer, p. 323: 2 to 3.5 m.; Patsch, P.-W., Vol. I, col. 1607: 2 to 3.5 m., and sometimes only 1.5 m.

The Alpine routes presented problems of construction which the best Roman engineer could not solve successfully; for, as Strabo puts it, "nature could not be subdued everywhere."¹⁵⁹ Spring freshets tore away sections of the pavement and made the roadbed so slippery that travelers were plunged to their death in bottomless ravines, while on the other side of the road precipitous cliffs might break loose and bury the travelers under huge avalanches. To avoid these difficulties, traffic over the Alps--so we are told--was restricted to the summer months, from May to September. As today, poles were placed along the highway to mark the route or warn against the dangers of the precipices. If these were not practical, guides were sent ahead to find the way. On the steep slopes men and oxen held the wagons back with ropes.

In discussing the routes followed by the roads in Raetia, our study begins with the Alpine passes and then proceeds northward, concluding with the limes area north of the Danube.

Alpine Passes

Proceeding from the west to the east, we first meet the Ligurian coast road and the passages over the Cottian Alps. All these are not of interest to us here. The Little St. Bernard (7,179 feet) over the Graian Alps and the Great St. Bernard (8,114 feet) over the Poenine Alps are not in Raetia, but nevertheless deserve first mention because of their importance to the western and northern areas next to Raetia.¹⁶⁰ Both routes had their beginning at Milan, which was linked to Rome by the Flaminian and Aemilian roads, the most important road center in the western part of northern Italy. From here both routes continued to Aosta (Augusta Praetoria), where they parted. The Little St. Bernard proceeded to Moutiers. The Great St. Bernard, an imperial military road of much greater importance, proceeded to Martigny on the Rhone, then to Lake Geneva, Vevey, Basel-Augst, Strassburg, and Mainz, making this the quickest and most direct route between Rome and Upper Germany. Both followed ancient Celtic and Helvetian paths. The Great St. Bernard particularly was improved with

¹⁵⁹For dangers and difficulties on the Alpine routes, see Strabo iv. 204, and Ammian. xv. 10. 4 f.; Hyde, pp. 24 ff.

¹⁶⁰Our best accounts of the Alpine passes are Hyde, and Partsch, P.-W., Vol. I, cols. 1606 ff. I am following Hyde in giving the altitude of the passes.

great care to meet the frequent demands of military leaders, beginning with Caesar.¹⁶¹

Although there was no Roman road at the Theodule (Matterjoch) pass (10,899 feet), it must have been known to the Romans, ad Hyde has pointed out, since a cache of coins from Nerva to Theodosius the Great has been found on its saddle in 1895.¹⁶² The fact that this route led to no point of importance, comparatively speaking, although it lay midway between the Great St. Bernard and the Simplon, made it very impracticable.

Opinions differ in regard to the Simplon pass (6,582 feet). While some think that it was not known to the Romans at all, others hold that it was used in the late Empire at least, although only to a limited extent.¹⁶³ It is safe to say that the pass perhaps was used by the Romans, but that it never rose to more than local significance.

We now come to the passes of the central or Raetic Alps, which included the following: St. Gotthard, Lukmanier, San Bernardino, Splügen, Septimer, Maloja, and Julier. Although the Romans did not use these passes as much as the far western and eastern passes, this group, nonetheless, is our first important contact with Raetia directly.¹⁶⁴ All passes of this group had a common approach from the south from Milan to Como, where the roads parted.

The St. Gotthard (6,929 feet), although one of the chief Alpine passes between Lake Como and Basel ever since it was opened

¹⁶¹Caesar B. G. III. 1; CIL, Vol. XII, No. 5528; Tacitus Hist. I. 61; Eutropius 9. 20.

¹⁶²Hyde, p. 78.

¹⁶³Doubtful: Partsch, P.-W., Vol. I, col. 1608 (he places it in the class with the St. Gotthard); Friedländer, I, 322; Hyde, p. 75; Hertlein, I, 8 (where he classifies the pass with the St. Gotthard, and adds that Napoleon first built an approach to the road). Used by Romans in the late Empire: Mommsen, Die Schweiz in röm. Zeit (1854), p. 23; Stähelin, pp. 356 ff.; E. Speck, Handels-geschichte (Leipzig, 1906), III 2B, 1083, par. 957; Julius Jung, Geographie von Italien und d. Orbis Romanus (München, 1897), p. 64; Hyde (loc. cit.) mentions also Ohlmann, Meyer, Näher, von Duhn, and Nissen. Stähelin (loc. cit.) presents the best arguments (based on coins from Trajan till 200 A. D., and on CIL, Vol. V, No. 6649), but concludes that the pass met only local needs and was not subsidized with funds from the imperial treasury.

¹⁶⁴Hyde (p. 83): "None of the nine passes now used between the Simplon and the St. Gotthard was known to the Romans."

up for modern traffic in the eighteenth century, was not used by the Romans. Frederick II opened it for the first time in 1236, but the northern approach, which is easy in all other Alpine passes, was extremely difficult here. Hyde contends that Hospental and also Andermatt, north of the pass, were known to the Romans.¹⁶⁵ For the Lukmanier pass (8,296 feet) there is no evidence that the Romans knew it. It lay on the road from Como via Bellinzona to Biasca, where the St. Gotthard route branches off westward through the Val Blemio; thence it continued along the Hither Rhine via Disentis to Chur. The same is true of the San Bernardino pass (6,770 feet) whose route leaves the St. Gotthard and Lukmanier road at Bellinzona, and then joins the Splügen pass road at Splügen Village, then proceeds northward to Chur.¹⁶⁶

There is no doubt about the Roman road from Milan via Como along Lake Como to Chiavenna, but the problem is how many of the three possible pass routes from Chiavenna to Chur were known to the Romans. The Splügen and Maloja-Julier routes leave no room for doubt, but the Septimer has been questioned seriously. It is very probable that all three were known to the Romans.¹⁶⁷ The Splügen, a one-ridge pass (6,945 feet), was the shortest route, running almost due north from Chiavenna to the Hither Rhine near Chur via Splügen Village and Thusis. The route from Chur followed the Hither Rhine to Bregenz and other points north. This route was neither safe nor easy, and was therefore not used heavily.¹⁶⁸ Both the Tabula Peutingeriana and the Itinerarium Antonini identify the route. The longer route turned eastward at Chiavenna via Cassaccia over the Maloja pass (5,961 feet) to Silvaplana; then turned abruptly almost straight west over the

¹⁶⁵Pp. 84 ff. Stähelin (p. 359) thinks that the Furka pass, an east-west pass west of the St. Gotthard, was used by the Romans, especially at the time when Raetia and Vallis Poenina were still joined administratively.

¹⁶⁶Some have inclined to the view that the Romans used this pass, but the evidence cited rather refers to the Splügen pass. Cf. Hyde, p. 92; Speck, loc. cit. For Roman inscriptions at Chur, see Vollmer, Nos. 70, 71, 71A.

¹⁶⁷For details, see Hyde, p. 75. To this it may be added that all three routes are accepted by Mommsen (Die Schweiz in röm. Zeit, p. 22), Haug (P.-W., Vol. IA, col. 55), and Stähelin, pp. 360 ff.

¹⁶⁸Hyde, pp. 95 ff.; Stähelin, pp. 363 f.; Partsch, P.-W., Vol. I, col. 1608.

Julier pass (7,503 feet) to Bivio; here the road turned north to Chur, via Tinzen and over the low Churwalden pass. This route was traveled heavily and is well attested.¹⁶⁹ The Septimer pass (7,582 feet) is a short cut of about eight and a half miles from Cassaccia to Bivio on the eastern route we have just discussed. Its use by the Romans is very probable.¹⁷⁰

The Umbrail (Wormser Joch) pass (8,220 feet) is a connecting link between the passes of the central Alps and the Brenner system of the eastern Alps. Although it pierces the Alps in the Brenner system, the route begins at Milan. From Lake Como the road followed the valley of the Adda, which flows into Lake Como, via Worms (Bormio), to the upper valley of the Etsch (Adige) to Mals, where it joined the Reschen-Scheideck route. The road is one of the oldest in the Alps, and was used for centuries before the Romans came in. The route was undoubtedly known to the Romans, since it was used so long before and was the shortest route from Milan and Lake Como to the Reschen-Scheideck pass.¹⁷¹

We now come to the Brenner system, which was of greater importance for Raetia than any other. The approaches from the south reached out fanlike from Milan to Aquileia, the most important focal point of highways and waterways in north Italy. The Milan-Mals road conducted traffic primarily to the Reschen-Scheideck pass, while the road from Trent via Bozen to Meran served as an approach to the Brenner pass also. Two feeders served Trent from the south, one from Hostilia on the Po via Verona up the Adige valley, and the other from Altino via Treviso along the Piave via Feltre and along the Valsucana to Trent. A third approach, the longest, went northwestward from Aquileia via Gemona and Zuglio, in the Carnic Alps, over the Plöcken pass

¹⁶⁹Massiliote coins prove its pre-Roman use. Evidence for Roman use: listed in *It. Ant.*; about 200 copper coins from Augustus to Constantius II; the "Julier" pillars (not milestones); ruins of a temple; and bits of roadway. Cf. Hyde, pp. 101 ff.; Stähelin, pp. 360 f.

¹⁷⁰Stähelin (p. 362) concludes that the Septimer route "nur als wahrscheinlich, aber nicht als erwiesen bezeichnet werden kann." But Hyde's arguments (pp. 111 f.) are rather convincing; viz, that it fits the mileage of the *It. Ant.* better and also puts meaning into the name of Bibio-Stalla (place where two roads meet, and stable or halting place).

¹⁷¹Cf. Hyde, pp. 113 ff.; Jung, p. 64.

(3,184 feet) and Gailburg pass, then west through the Puster valley to near Franzenfeste, where it led to the Brenner pass via Sterzing (Vipiteno). The roads north from the Brenner system had a common objective, Augsburg to Druisheim, and the Danube.

The Reschen-Scheideck pass (4,800 feet) was the most western pass in the Brenner system. Its route led north from Mals over the pass via Nauders and along the Inn from Finstermünz to Landeck, thence over the Fern pass (3,970 feet) and via Füssen and Epfach to Augsburg.¹⁷² This is the route of the famous via Claudia Augusta, which was planned and begun by Augustus through his stepson Drusus in 15 B. C. Drusus did not live to complete it, however, but his son, emperor Claudius, was proud to complete it in 46/7, boasting that he had joined the Danube and the Po.¹⁷³ The via Claudia thus came from Altino, Treviso, Feltre, Trent, and Bozen to Meran, where it followed the Vintschgau valley to Mals, and then turned north. It was an old road used long before the Romans, as the Bronze Age finds along the highway show, and it remained the important military road to Raetia for two hundred years, until Septimius Severus and Caracalla improved the Brenner road, which then became the main military connection between Italy and Raetia from the end of the second century onward, and was improved as late as Maxentius and Julian. The new via Claudia Augusta was begun in 195 and completed in 215.¹⁷⁴ The Brenner pass (4,495 feet) received its traffic from the south at Sterzing (Vipiteno), which in turn was fed by the roads from Franzenfeste, and Meran over the Jaufen pass. From the Brenner pass the road proceeded through Seben, Matreio, Wilten (near Innsbruck), over the Scharnitz pass, Partenkirchen, and Epfach, to Augsburg, and beyond to the Danube. Thus the new military road made connections with the old road at Meran to form a much shorter route to the north into Raetia. The road goes back many centuries earlier and

¹⁷²Hyde, pp. 151 ff.; Haug, P.-W., Vol. IA, col. 55.

¹⁷³Vollmer, Nos. 465, 469; CIL, Vol. V, No. 938. The ends of this route are also recorded in the Tab. Peut. and It. Ant. In addition to Hyde (loc. cit.) and Haug (loc. cit.), see also Patsch (P.-W., Vol. I, col. 1608) and Hertlein (I, 7 f.).

¹⁷⁴Vollmer, No. 459 (this is the first mention of the Brenner route), Nos. 454, 457. From the Eisack valley, see Vollmer, Nos. 57, 58, 59, 60.

has many ancient fortifications, but its real history begins with the Romans. It was also a favorite passage during the Middle Ages. This is due to its advantages: low altitude, shortening of the route between Italy and the north, relative freedom from snow, and many towns and numerous branch routes.

We need not proceed to the passes east of the Brenner system, since they are not of great importance for our particular study. The Romans thus were acquainted with all of the major passes which were of significance for Raetia. In fact, the Middle Ages opened up few new passes of importance--the St. Gotthard is an exception. Augustus stands out as the greatest builder of roads in the Alps. During his reign he either built, or had built for him, at least eight Alpine roads.¹⁷⁵ Trade, which had trickled through the Alps or gone around them, now passed over the Alps. Thus Strabo's eulogy on Augustus for building Alpine roads is not entirely a vain boast.¹⁷⁶

From the Alpine Passes to the Danube

The southern part of Raetia, including the Swiss portion, had few Roman roads. As soon as we come to the area north of a line drawn approximately east-west through Bregenz at Lake Constance, an elaborate network with many lateral arteries begins. This is especially true of the sector from a Bregenz-Kempten-Epfach line to the Danube and of the trans-Danubian area. In this level area of the province the greatest development was concentrated.¹⁷⁷

The first important south-north road from the Alps in the west was from Chur to Bregenz, which together with Augsburg was the most important point on the highways south of the Danube. This road followed the Hither Rhine, and has Maienfeld (Magia) and Altenstadt-Feldkirch (Clunia) as way stations in the itineraries. Two almost parallel routes led from the Brenner system to Augsburg,

¹⁷⁵Hyde, p. 186. This covers all of the Alpine passes.

¹⁷⁶Strabo iv. 206.

¹⁷⁷Good maps are indispensable. Hyde has a practical map for the Alpine passes; Vollmer's large map is also very serviceable for this area. Karl Urban (Das alte Rätien u. d. röm. Inschriften [Magdeburg, 1889], pp. 33-36) presents tables summarizing the places mentioned in the Tabula Peutingeriana, Itinerarium Antonini, Notitia Dignitatum, and other sources where place names occur.

and on to Druisheim and the Danube. The western branch from the Reschen-Scheideck pass turned to the Lech from the Fern pass and followed this stream to Augsburg via Flüssen (Foetibus) and Epfach (Abodiacum). The eastern route, from the Brenner and Scharnitz passes, followed the Inn westward from Wilten to Zirl (Terioli), then turned north to Partenkirchen (Partano) and from there north to Augsburg. A branch from Wilten, which is not mentioned in the itineraries, turned westward and proceeded over the Fern pass to Bregenz via Kempten.¹⁷⁸ This road was constructed by Decius and his son in the middle of the third century. A shorter bypass from Landeck to Bregenz via the Arlberg has been assumed, but is highly improbable. Another branch, built by Septimius Severus and his son Caracalla, forked northward at Innsbruck, near Wilten, and followed the Inn to Kufstein, where the Inn began to be the boundary between Raetia and Noricum, and then advanced north to Rosenheim (Pons Aeni) near Pfaffenhofen, where it crossed the main east-west highway. Here it left the Inn and went straight north to Regensburg via the Turum and Javisura of the Itinerarium Antonini.¹⁷⁹ This road was of great strategic value since it provided a short cut to the camp of the legion.

The main east-west road cut directly through this area, and led to Salzburg (Iuvavum), on the Salzach in Noricum, thus opening up the way to the lower Danube. This is the road of which the Romans boasted that there was an excellent highway from Gaul to the Black Sea, and which carried the heaviest load of traffic through Raetia.¹⁸⁰ The northern road along the Danube, the other important east-west road which will be discussed in the next section, was also used for commercial purposes, but always remained primarily a highway of importance for the military activities of the province. In Raetia the southern road had two branches, one from Bregenz and the other from Augsburg. Both points were the centers of many feeders from the west and the northwest. Then, too, many crossroads added to the usefulness of this road. From Bregenz, the southern branch, the road proceeded to Kempten, via

¹⁷⁸Vollmer, Nos. 453, 455; Hyde, p. 123, and Haug, P.-W., Vol. IA, col. 55.

¹⁷⁹Vollmer, Nos. 459, 454, 467; Hyde, p. 140; Domaszewski, "Die Beneficiarii u. d. röm. Strassennetz," Westd. Zeit., XXI (1902), 165.

¹⁸⁰Aurelius Victor de Caes. xiii. 3: "Iter, quo facile ab usque Pontico mari in Galliam permeatur."

Vemania, near Isny, thence via Escum (near Altdorf) to Epfach, then via Urusa, near Raisting, to Gauting, where it followed the southeasterly course to Rosenheim (Pons Aeni) via Isinisca (near Helfendorf). After crossing the boundary at Rosenheim, it led to Seebruck (Bedaum), an important toll station on the route, and continued to Salzburg. The northern branch from Augsburg had only two stations mentioned in the Itinerarium Antonini--Ambre (Schöngeising, on the Amber) and Isunisca. It went southeast from Augsburg till Gauting. When Augustus first built a highway here, it seems that his road did not follow this direct route to Gauting, but that his road led to Augsburg from Bregenz, a problem which will be considered later.

West of Bregenz this highway, according to the itineraries, went south of Lake Constance to Arbon (Arbor Felix), Pfyn (Ad Fines), near the Raetian boundary, and from there to Windisch (Vindonissa), site of a legionary camp, and then to Augst (Augusta Rauracum), and thence to Strassburg and Mainz.¹⁸¹ A side road led from Pfyn to Eschenz (Tasgaetium), near Stein on the Rhine.¹⁸² Farther south a road left the Chur-Bregenz route at Maiefeld for a shortcut to Windisch via Ragaz, Walenstadt, Walensee, and Zurich, and thus connected up with the route from the Great St. Bernard over the Poenine Alps.¹⁸³ Before leaving the discussion of Bregenz and vicinity, it may be mentioned that the Pfyn-Eschenz road continued on to the north to Laiz via Singen, and that radial roads have been surmised from a road on the north side of Lake Constance northward to Mengen, another to Zwielfaltendorf, another to Emerkingen, and still another to Risttissen via Ravensburg and Laupheim.¹⁸⁴ Although there is much uncertainty about some of these, nevertheless the area was undoubtedly well supplied with radial outlets toward the north.

Several routes from Bregenz to Augsburg are given in the itineraries. The shortest, which was perhaps the only connecting link with the great east-west thoroughfare at first, proceeded

¹⁸¹CIL, Vol. XIII, Nos. 9075, 9076, 9077; Stähelin, p. 347.

¹⁸²Stähelin, loc. cit.

¹⁸³Stähelin, pp. 352-56 (considerable detail); Mommsen, Die Schweiz in röm. Zeit, p. 22; P. C. Planta, Das alte Rätien (Berlin, 1872), p. 94.

¹⁸⁴Hertlein and Gössler, pp. 171-89.

via Isny to Kempten, and from there turned northward at a sharp angle to the Wertach, which it followed to Augsburg. Several routes seem to have existed between Kempten and Augsburg. The most roundabout route noted in the itineraries went via Günzburg (Guntia), on the Danube, and then down to Kellmünz (Caslius Mons) to Kempten, then to Bregenz.

Augsburg was well supplied with roads from all directions. At Günzburg, at Aislingen, and at Drusheim, all on the Danube, connections were readily made from the west in Upper Germany and the territory north of the Danube. The road along the Danube also connected all of the castella and settlements along this river with each other.

Many other roads are found, or have been surmised in this area, but a detailed discussion of all in addition to the principal arteries already mentioned would add little to the general impression that the transportation facilities in this area were of the best.

From the Road along the Danube to the Limes

This northern portion of Raetia was the most fortunate in regard to roads. Military expediency, rather than commercial necessity, accounts for this. From the military point of view, the road which crossed Raetia along the Danube on the south side of the river was of tremendous importance. It started in Upper Germany and continued along the Danube into Noricum. From Strassburg the road continued in Upper Germany to Rottweil and on, southeastward to Tuttlingen on the Danube. Soon after leaving Tuttlingen it swerved considerably from the Danube and crossed the Raetian boundary, passing on its eastward course through, or near, Messkirch, Mengen, Emerkingen, Rissstissen, Drusheim, Burgheim, Neuburg, Oberstimm, Manching, Eining, Saal, Alkofen, Abbach, Regensburg, Straubing, Plattling, Künzing, Vilshofen, and Passau, on the Inn, where the road crossed the boundary into Noricum. At Günzburg, Aislingen, and Drusheim were important side connections with Augsburg. The Tuttlingen-Günzburg link was constructed at least by the time of Claudius. Cn. Pinarius Clemens, under Vespasian, built a direct connection from the north through the Schwarzwald to Rottweil and Tuttlingen.¹⁸⁵ The road was of

¹⁸⁵CIL, Vol. IHI, No. 9082; Haug, P.-W., Vol. IA, cols. 50 f.; Koepp, Germania Romana, p. 32.

particular significance in the early and again in the late period, when the area north of the Danube was not held by Rome. The distance from Strassburg to Augsburg, and so the distance on the famous Gaul-to-the-Black-Sea route, was shortened considerably by shortcuts from Cannstatt to Augsburg. One route followed the Neckar from Cannstatt to Plochingen, at the confluence of the Fils and the Neckar, along the Fils almost the entire distance to Geislingen, to Urspring, down to Langenau, to Faimingen, where it crossed the Danube to Aislingen, and on to Augsburg. A shorter route was from Langenau over the Danube bridge at Günzburg, and then to Augsburg.¹⁸⁶ Another route led from Cannstatt and Plochingen to Heidenheim, and then to Faimingen. An alternate route was offered by the road from Heidenheim to Günzburg. A third route from Cannstatt to Augsburg was via Künzen to Kirchheim to Urspring, or via Donnstetten from Kirchheim to Urspring.

The last east-west road through Raetia is the road of the Tabula Peutingeriana from Windisch to Regensburg and beyond.¹⁸⁷ In Raetia it pursued a course roughly midway between the Danube and the limes, and then crossed the Danube at Eining to join the road along the Danube eastward. From Windisch the highway led to Rottweil over the Neckar via Zurzach, Schleithelm, and Hüfingen. From Rottweil to Rottenburg it left the Neckar, but followed the Lauter via Kirchheim to Donnstetten, the first station in Raetia. Through Raetia it pursued the following course: Donnstetten (Clarena), Urspring (Ad Lunam), Heidenheim (Aquileia), Oberdorf (Opie) at Bopfingen or the Ipf hill, near Offingen at the Sechte (Septimiacum), Munningen (Losodica), Gnotzheim (Medianis), Theilenhofen (Iciniaum), Weissenburg (Biriciana), Pfünz (Vetonia), Kösching (Germanicum), Biburg near Pförring (Celeusum) on the Kelsbach, Eining (Abusina), on the south side of the Danube and thence on via the road along the Danube eastward.

Many lateral routes, besides those already mentioned, created a system of communication which served this area very satisfactorily. An approach from the south came from Laiz to Burladingen, to Gomadingen, to Breiten Weg, two and a half kilo-

¹⁸⁶ Bridge at Günzburg: Eumenius paneg. Const. 2; Hertlein and Gössler, II, 217.

¹⁸⁷ Hertlein, I, 43; Haug, P.-W., Vol. IA, col. 58; Winkelmann, XI Bericht d. röm.-germ. Kom., p. 54.

meters to the east of Donnstetten, where it joined the Donnstetten-Urspring highway.¹⁸⁸ From Donnstetten north to Strassdorf and to Schierenhof a Roman road has been surmised, but it remains doubtful.¹⁸⁹ Lorch was connected to Cannstatt by a road through the Rems valley, and to KÖngen by an old trail south to Faurndau, then up the Fils to Plochingen and down the Neckar to KÖngen.¹⁹⁰ An ancient road was used from Urspring north to Unterböbingen.¹⁹¹ The road from Heidenheim to Aalen, on the Kocher, via Unterkochen and Oberkochen, is certain. From Oberdorf (Bopfingen) a connecting link ran northward to Buch, at the Jagst. Hertlein finds traces of a Roman road continuing from Buch to Schierenhof via Aalen, Unterböbingen, Zimmern, Gmünd, and Möggingen.¹⁹² Another branch, also over an ancient trail, led from Oberdorf to Halheim. From this same Oberdorf sector, a road, which must have been of some consequence, led south to Faimingen, and thus afforded a direct connection with the Danube. A connection from Donauwörth ran north to Septimiacum (Offingen) and Munningen. The road forked at Grossorcheim, the eastern branch continuing to Munningen; the western fork proceeded to Nördlingen and Septimiacum.¹⁹³ In the east, Pfünz enjoyed a direct connection with Augsburg, via Nassenfels and Steppberg, where it crossed the Danube and passed through Drüshelm to Augsburg.

Before leaving the discussion of the roads in this area, a word should be added also about the relation of the limes castella to the Roman road system. There was no Roman road on the limes itself, nor was any effort made to connect the limes castella with a road. The castella from Weissenburg to Pförring were connected by a road, but this road along these castella was not constructed for the sake of the limes castella. The only border castella connected by roads were those on the Danube from Eining to Passau, and those along the entire Danube or below the

¹⁸⁸Hertlein and Gössler, II, 225-40.

¹⁸⁹Hertlein, I, 103; Hertlein and Gössler, II, 255; K. Weller, "Review of Die Römer in Württemberg by Hertlein, Paret, and Gössler," Germania, XV, 59.

¹⁹⁰Ibid.

¹⁹¹Hertlein, "Römerstrassen im rät. Limesgebiet Württembergs," XI Bericht d. röm.-germ. Kom., p. 65.

¹⁹²Ibid., pp. 66-68.

¹⁹³Hertlein and Gössler, pp. 224 f.

Danube in the west when the boundary receded south of the Danube. Another thesis, which has received some support, contends that all castella on the limes had a direct connection with the older forts, or with cities of the interior (Rückverbindungsstrassen). Here, too, we have seen that in certain instances this is true, but it is impossible to reach a definite conclusion from these few specific instances, which are usually instances where favorable conditions or pre-Roman roads suggested the route to the Romans.¹⁹⁴

The question still remains as to whether and how the Roman roads connected up with the highways and byways of the barbarians in non-Roman territory, especially in the area adjoining Roman provinces. Paulus firmly defended his postulate that the Roman roads were tied up with the roads beyond the Roman boundaries.¹⁹⁵ Winkelmann's and Schumacher's studies have produced sufficient evidence that the Roman system was not integrally self-contained.¹⁹⁶ It is only over such roads that things Roman and Roman ideas could have penetrated so deeply into the interior of barbarian Germany, not only into the nearby sections, such as Bohemia, but into such remote places as Hungary and Pommerania. We know also from observation today, that trade has a profound penetrating force. The transportation of amber from the Baltic to Italy and to the Black Sea shows how far goods could travel in and through barbarian lands. Roman household articles in considerable volume, Roman money, and Roman articles of jewelry were used by the Germans.¹⁹⁷ Many Roman words were absorbed in the daily language. The German

¹⁹⁴Weller, Germania, XV, 59, and Hertlein and Güssler, II, 255.

¹⁹⁵Eduard Paulus, Die Römerstrassen (Stuttgart, 1857), p. 15.

¹⁹⁶Winkelmann (XI Bericht d. röm.-germ. Kom., pp. 7-54) cites many examples where the roads continued beyond the Roman boundary into the enemies' land. See also Schumacher, III Bericht d. röm.-germ. Kom., p. 27.

¹⁹⁷Friedrich Kauffman (Deutsche Altertumskunde [München, 1913], I, 466-99) has collected a large amount of material to show how strongly the Germans were adopting Roman ideas. Drexel (VII Bericht d. röm.-germ. Kom., p. 74) reports the find of a Gallic remint at Neunburg v. W., far north of Roman territory on an old road from the Bavarian forest to Bohemia. W. T. Arnold (Roman Provincial Administration [London, 1879], p. 16, n. 5) says very aptly: "The Roman trader was ubiquitous. He even preceded Roman arms; thus we find him crossing the Great St. Bernard and paying toll to the barbarians before either end of the pass was secured by Roman troops; and wherever the Roman arms were carried, the merchants followed in crowds."

soldier copied the equipment of the Roman soldier, including leather helmets and spurs. Even the Roman burial was accepted in some parts of Germany. All of which seems to indicate that, at many points at least, the Roman roads made connections with those of the barbarians.

CHAPTER VI

ROMAN LIFE

This chapter deals with the influence exerted both by the Roman soldier and the Roman citizen on life in the province. It is not always possible to determine exactly where the influence of one ends and where that of the other begins, for the two influences are so closely associated that it is impossible to separate the two. In a frontier province such as Raetia the military influence was naturally predominant. This is particularly true of the entire northern half where the greatest population and activity of the province were concentrated. The many castella, each manned with approximately five hundred or a thousand men, left their mark on the mode of living. The uniform of the soldier always makes a deep impression. Then, too, the soldier, whose rate of time preference is usually very low, is ready to satisfy his immediate desires as long as the means last. He was in Raetia the largest consumer of Roman goods. But the ancient soldier was not only a consumer; he was also, as we have seen in the last chapter, a producer to a very large extent.

The abodes of the soldiers have been discussed in the chapter dealing with the castella. Civil settlements were more numerous even than the camps of the soldiers, for they were found not only in the vicinity of practically every camp, but they have left their mark at many favorable locations throughout the province. A continuous stream of antiquities from these sites is even now widening the vista through which we gain a view of Roman life. The character of the civil settlements is best revealed through a study of their plans.¹ At present the sites of civil settlements

¹Kempton: F. Drexel, Germania Romana (Bamberg, 1924-30), II, 11 f., plate XI, 3 (general plan); p. 13, plate X, 2 (forum); p. 13, plate XI, 3 (thermae). Bregenz: ibid., p. 11, plate XI, 1 (general plan); p. 13, plate X, 3 (forum). Faimingen: ibid., p. 17, plate XVII, 1 (general plan). Kempton and Bregenz: Carl Blümlein, Bilder aus dem Röm.-germ. Kulturleben (München and Berlin, 1926), p. 35 (fore). Cf. Friedrich Wagner, Die Römer in Bayern (München, 1928), pp. 58 ff.; plate VII (sudatorium and

range all the way from completely recovered cities to meagre traces of homes.

The settlement at Kempten (Cambodunum), to select one for our discussion, is unique in several respects. It is one of the best preserved sites not only in Raetia, but in all Germany. The ruins were covered in the course of time, and were left untouched by the hand of man until modern archaeologists excavated them. This is a rare occurrence, because the ancient sites usually invited continuous settlement, and with it the attendant destruction of the old. This was the case in Augsburg and Regensburg, the two leading cities of Raetia. The ruins at Kempten are unique in another respect: the city was an average provincial city, since it was not drawn into the administration of the province. As far as we know no soldiers were stationed here until the late period. The Roman Cambodunum was thus untouched by the direct influence of the soldier and the civil official. Another unusual feature is the clear detail in which the outlines of the city can be traced today. For two hundred years, from the first to the third centuries, the development of the city can be followed step by step. It shows a well planned and organized city. Roman features of the provincial city--to mention some of the more prominent ones--include fora, two thermae, basilicas and curiae, a temple, insulae, and a public inn.

In addition to the compact settlement of cities, many private establishments from the most elaborate villae rusticae to individual homes have been found.² The villae rusticae follow the Roman pattern very closely, and include the features commonly found everywhere in Roman lands. The structure of the buildings, however, showed a Keltic influence.³ The simple Keltic home was

latrines of thermae); and Paul Reinecke, "Cambodunum," Germania, XIII, 146-54.

²A convenient survey of the many villae rusticae and homes may be found in Haug and Sixt, Die röm. Inschriften und Bildwerke Württembergs (Stuttgart, 1914), and in O. Paret, Die Römer in Württemberg (Stuttgart, 1932), Vol. III. For villa rustica at Burgweinting near Regensburg, see Drexel, II, 22, plate XXVI, 2; for homes in Bregenz, *ibid.*, p. 12, plate XI, 1. Ruins of Roman buildings are also found in the more sparsely settled area of southern Raetia, as at Castlemoor and Chur in Switzerland. Cf. Otto Schulthess, "Ein Dezennium röm. Forschung in der Schweiz," XV Bericht d. röm.-germ. Kom., pp. 30 f. Discovery of new finds is recorded in Germania (XVI, 151; XVII, 134; XVIII, 141--where three are noted).

³Paret, pp. 38 f., 96.

adapted to the Roman style by adding two towers at the corners and by connecting the two towers with a long collonaded façade. The Kelts also showed a preference for oblique angles to the severe right angles of the Romans. A gradual change in the use of materials may be noted. Dwellings were at first constructed of wood and some stone, but gradually the use of stone became customary. Various types of Roman masonry were employed. Opus incertum is frequently found, while opus reticulatum and opus spicatum also found application.⁴

A distinctively Roman feature was the bath, for where the Roman settled there he introduced the bath. The best examples of thermae in Raetia are those at Kempten.⁵ The use of the Roman bath came in gradually. The remodeling of the old dwellings indicates clearly that this convenience was added to the old structure. Later plans show that the Keltic population included the bath immediately when the homes were built, frequently as a separate structure. This development is apparent particularly after 200 A.D. Not only did every castellum and every villa rustica have its bath, but also every pretentious private dwelling. In architecture they vary from the elaborate to the most simple, from the most sumptuous to the most humble. The thermae and larger baths enjoyed all of the customary appointments. Near the entrance was the apodyterium. Next came the frigidarium with the piscina or labrum. The tepidarium and the caldarium, frequently with the alveus, met the demands for a warm bath. And sometimes the sudatorium and the laconicum furnished the climax for the hot bath. Fraefurnia, which are found in varying number according to the needs, and hypocausts are never missing. Adequate drainage for waste water was also provided. The remains, such as those at Augsburg and Griesingen, show that lavish decorations were employed, such as

⁴Opus reticulatum: Paret, p. 58; opus spicatum: Hugo Graf v. Walderdorff, "Die Römerbauten an dem Königsberge bei Regensburg," Verh. d. hist. Ver. von Oberpfalz und Regensburg, L, 351; Reinecke, "Röm. und frühmittelalterliche Denkmale vom Weinberg bei Eining a. d. Donau," Festschrift z. Feier des fünfhundertj. Bestehens des röm.-germ. Central-Museums zu Mainz (Mainz, 1927), pp. 158 ff.

⁵See supra, p. 117, n. 1. Other towns also had public baths; thus Eschenz (Tasgaetium) in the west (Felix Stähelin, Die Schweiz in röm. Zeit [1931], p. 449). Two good examples of larger baths are those at Augsburg (Ludwig Ohlenroth, "Fundchronik," Germania, XV, pp. 95 f.) and at Griesingen (Paret, pp. 90 ff.).

a marble facing in many colors, alabaster vases, floor mosaics, stucco friezes, bronze statues, and glass mosaics on the walls studded with stones in blue, green, red, and yellow.

Mosaics and wall decorations were not limited to their use in bathing establishments. Mosaics have been found at various places, but two of the best examples are from Augsburg and Westerhofen.⁶ The gladiator's mosaic of Augsburg has suffered greatly, although a number of segments with scenes from the gladiatorial fights and the circus are intact. The mosaic from the Westerhofen villa conveys an impression of beauty. Surrounded by elaborate geometric and floral designs, it covers an area of 833 square feet, and is made entirely of stone. The octagonal impluvium in the center is surrounded by a setting of marine figures, such as Nereids, Tritons, and dolphins. Outside the large square area are a hunting scene in a rectangle, and a wild steer and bear enclosed in a semicircle.

The wall decorations have deteriorated considerably, and therefore have come down to us in mere fragments.⁷ Pompeian red is very common. Light blue is also popular. The decorations found at Griesingen have been mentioned in the preceding paragraph. A marble effect has also been found, where black lines were imposed on a red background.⁸ It is difficult to draw comparisons between this provincial work and the work done at Rome or Pompeii, since our specimens from Raetia are so fragmentary. But it has been noted that the work deteriorated in time as the copies were reproduced. The work is considered poorer than that produced in the Roman Germanies.⁹

The rigors of the climate in Raetia made artificial heating a necessity for comfortable living. The open hearth and portable charcoal braziers were first used to meet the demands. Then the hypocaust system was generally introduced into the province,

⁶Westerhofen: Joseph v. Hefner, "Der röm. Mosaikfußboden in Westerhofen," Oberbayerisches Archiv, XVII (1857), 1-9, and plate; Wagner, plate XX. Augsburg: Vollmer, No. 147 and plate 20. Mosaic floors have also been found at Augsburg (Ohlenroth, Germania, XV, 96), Tittmoning (Drexel, "Museographie," VII Bericht d. röm.-germ. Kom., p. 76), Mengen (Haug and Sixt, p. 47), and Ertingen (ibid.).

⁷A full-page reproduction in black of the wall decorations at Ummendorf is given by Paret, plate VIII.

⁸Paret, p. 278.

⁹Paret, pp. 56 f.

as the numerous finds would prove.¹⁰ The system was installed in baths at castella and villae rusticae. Other rooms were also heated. Square and round bricks were used for pillars in the suspensura. Tubuli served as conduits in the walls, and also as pillars.¹¹ In the course of time the suspensura was eliminated in favor of the tunnel system, in which walls, frequently connected with tubuli, ran underneath the entire length of the room.

It was always important to have a steady and pure supply of water available. Large quantities were needed for household purposes and especially for the baths. In places where the population was concentrated, as in cities and castella, heavy demands were made which necessitated elaborate water works. The remains in Raetia are, however, very modest, as no impressive aqueducts have come down to us. Perhaps they never existed in Raetia. The Romans preferred water from a spring.¹² The spring was excavated and cased with heavy timbers of pine or oak. At Donnstetten the ends of the timbers were carefully mortised to dovetail at the corners. Here also the roof, posts, shingles, chain, and the roll on which the chain was wound were found. If the spring was not conveniently located, the water was carried to reservoirs for storage at the buildings where the water was used. Lead or wood pipes bound with iron hoops were used to convey the water.¹³ An interesting outlet of the water from a spring has come to us from Schierenhof. The water was discharged from a lead pipe through a hole in a block of stone on which the relief of a water nymph had been sculptured. If spring water was not available, wells were sunk. The number of Roman wells found is very large, and various antiquities, such as bits of rope, traces of wood, and the like,

¹⁰The hypocaust system was not so generally used east of Raetia as it was in Raetia and the two Germanies. See Ernst Nischer, Die Römer im Gebiete des ehemaligen Ost.-Ungarn (Wien, 1923). For general discussion of hypocausts, see Paret, pp. 72 ff. Cf. Walderdorff, pp. 381 ff., and plate IV, and Drexel, p. 23, plate XXVIII, 3.

¹¹Thus at Nassenfels (F. Winkelmann, "Fundchronik," Germania, XIV, 86).

¹²Schierenhof: Haug and Sixt, pp. 132 f., No. 73; other places: Paret, pp. 98 f.

¹³Lead pipes at Schierenhof and Jagsthausen: Paret, p. 108; wood pipes with iron hoops at Kempton: Reinecke, Germania, XIII, 148; Mengen: Drexel, p. 26. No actual wood has been found, only iron hoops. Lead pipes are rare, since men of later times retrieved the lead for their own use.

show that the method of hoisting the water was similar to the one employed at the spring at Donnstetten.¹⁴ Cisterns were also constructed to store rain water.

In conclusion to our survey of the Roman habitation in Raetia, it may be added that cellars have been excavated at various places.¹⁵ A villa at Straubing had eight, but most were of very small size. Small cellars were also constructed at the castella.

This review of civil settlements and buildings of all kinds is strikingly void of great structures. This may be due to several reasons: first, that the destruction caused by invasion and man's greed in subsequent centuries account for this situation; second, that such buildings were not plentiful in Raetia. The ravages of time were not kindly disposed toward great Roman antiquities in Raetia. The province cannot boast of great, colossal ruins; there is nothing monumental, or stupendous, in its greatness or grandeur in all Raetia. The only substantial ruins of walls and buildings above the ground are those of the Porta Praetoria at Regensburg.¹⁶ About two stories of the tower, and the core of the arch in the gateway are all that have survived. The barbarian invaders were probably less destructive than the inhabitants of later times who razed the old structures for the sake of gaining cheap building material. There is also some point to the second factor mentioned above. Theatres, amphitheatres, circuses, aqueducts--all these do not seem to have embellished the cities of Raetia.¹⁷ As far as we know, only Augsburg may have had an amphitheatre. Small theatres have been found, but there is not

¹⁴Paret (p. 98) states that sixty shaft wells and seven spring enclosures have been found in Württemberg alone.

¹⁵Straubing: Keim, "Fundchronik," Germania, XV, 280 ff. Epfach: Wagner, "Fundchronik," ibid., XVI, 154.

¹⁶Pictures: Drexel, II, 18, plate XIX, 1; Wagner, Die Römer in Bayern, plate I.

¹⁷Amphitheatres: Ludwig Friedländer, Sittengeschichte (Leipzig, 1919-21), IV, 205 ff., 222 ff.; Stähelin, p. 440. Upper Germany has five; Lower Germany, two; Noricum, one; Upper Pannonia, two; Lower Pannonia, two; Dacia, three. Theatres: Friedländer, pp. 243 ff. Six are listed for Upper Germany; none for Lower Germany and the Danube provinces. Circuses: Friedländer, pp. 240 ff. In the provinces, Friedländer places five in Gaul, seven in Spain, three in Mauretania, and two in Africa.

sufficient evidence for large theatres even to venture an assumption. This is the more striking since Upper Germany has produced many amphitheatres, and the Danube provinces east of Raetia also have made their contributions.

The greatest contribution to the restoration of Roman life in Raetia was made by the burial grounds of the dead. Vollmer's plates are almost exclusively of sepulchral monuments or of objects found in the cemeteries. Scenes from tombstones and votive tablets frequently portray incidents from everyday life. The mixed antiquities from burial places include a myriad of objects, such as weapons, fibulae, jewelry of all kinds, clay vessels, coins, toys, lamps, glassware, tools, and the like. The sepulchral inscriptions are especially enlightening for the religious life of the province. Formal burial grounds are encountered at all castella, citiles, and villae rusticae, while isolated burials were scattered throughout the province.¹⁸ The memorials varied from the elaborate group formations and finely sculptured monuments to the simple stone slab with a very brief inscription.¹⁹ Two modes of disposing of the dead were used: cremation, which was so popular during the early Empire, and then inhumation. The larger cemeteries, as at Regensburg, show this chronological development very clearly. Cinerary graves are found exclusively, then burials are mixed with them, and finally burial becomes exclusive. Ustrinae were usually located close to the cemetery, or in the midst of the cemetery. The ashes in the cinerary graves were usually placed in clay or glass urns. Amphorae were also used as urns. The ashes of the poor were simply covered with tegulae or tubuli, or received no protection whatever. Coffins were commonly used

¹⁸ Regensburg: Heinrich Lamprecht, "Der grosse röm. Friedhof in Regensburg," Verh. d. hist. Ver. von Oberpfalz u. Regensburg, LVIII, 10 ff.; H. Dragendorff, "Neues zur röm. Städte u. Ortskunde," I Bericht d. röm.-germ. Kom., p. 44. Bregenz: Walther Schmid, "Röm. Forschung in Österreich," VI Bericht d. röm.-germ. Kom., pp. 87 f. Paret, pp. 160 ff. (burial at castella), pp. 165 ff. (burial at villae rusticae), p. 173 (for instances where Romans used pre-Roman burial places).

¹⁹ For the group formation, which seems to have been most popular in the Augsburg region, see Paret, "Aalen. Ein grosser röm. Grabbau," Fund. a. Schwaben, N. F. III, pp. 113 ff.; Wagner, Die Römer in Bayern, p. 97. For an elaborate single monument, see Fridericus Vollmer, Inscriptiones Baivaricae (München, 1915), No. 123 and plate 17; Wagner, Die Römer in Bayern, plate XII. Cf. Friedrich Koepp, Germania Romana, Vol. III.

for the burials. Coffin nails have also been found among cinerary urns. Stone coffins, which are encountered quite frequently, graced the tombs of those who could afford the additional expense. At first the bodies in the burials were placed in any direction, but gradually the east-west position became the rule, so that the corpse faced the rising sun.

The cities of Raetia and the agricultural areas of the northern part particularly teemed with activity. The economic and commercial life of the province, which will be considered next, did not reach the high stage of development noted in some of the neighboring provinces owing to unfavorable natural conditions. Yet such activities were constantly going on. The population, both military and civil, was a great consuming body. Consumption naturally necessitated local production since importation into Raetia greatly increased the cost of the product. On the South were the hazardous Alps, and to the North dwelt the barbarians. The only easy passage of bulk commodities was eastward, where there was little to be gained by contact with the sparsely settled Danube provinces, and westward, where intercourse was limited to the narrow area from Lake Constance to the limes.

Although the Roman road system served a military purpose above all, private commercial enterprises must have made extensive use of them. This was true even of the time before the Roman legions had conquered this territory. The very fact that the Romans found so many roads, many of which had been used for centuries, indicates that the principal lines of communication were used not only for local needs, but also for commercial purposes on a more extensive scale. The free circulation of Massiliote coins and gold coins known as "Bogenschildchen" extended over the greater part of Raetia. The export of products, mentioned in the Introduction, must have produced considerable commerce between the southern part of Raetia and Italy. Then, too, a steady stream of imports, especially in the first century, and for some time thereafter until the products were made in Raetia to a larger extent, must have resulted in a constant volume of commerce. The amount of goods sent through Raetia from Italy northward must have been small, on account of the more favorable facilities which provided more direct routes without going through Raetia.²⁰ On

²⁰The three most commonly used amber routes, for instance, avoided going through Raetia. Cf. Anton Kisa, Das Glas (Leipzig, 1908), I, 116 f.

the other hand, the antiquities seem to show that much commercial activity was carried on over the east-west crossroad from the three feeders in the west at Windisch, Tuttlingen, and Cannstatt-Köngen. The fact that the use of the highways was always restricted by the administration, even in the late Empire when the restrictions were let down more than they had been at any time before, does not admit the conclusion that transportation was stifled entirely.²¹ The highways were used little for pleasure or sightseeing; the Romans were too practical-minded for that.²²

Mute but vivid evidence for commerce is portrayed in various antiquities. Thus a well preserved scene from a relief found at Augsburg shows four men engaged in the process of bundling a large pile of merchandise with the aid of clubs, while a supervisor records the transaction.²³ A scene from Augsburg shows a large wood cask of wine bound with metal hoops and placed on a wagon of four wheels, while another scene shows nine men engaged in rolling wine casks.²⁴ The prominence of Mercury, as we shall note later, also gives evidence of commercial activity in Raetia. Busts of Mercury were used as weights.²⁵ Further evidence is found in numerous small antiquities which were used by merchants and traders, as the lead weight from Theilenhofen.²⁶

Many articles from Italy and surrounding Roman provinces were attracted to Raetia by the steady demand of those who could pay the price because they either were accustomed to the use of such articles, or because they valued the imported goods more highly, or because it was the smart thing to do. In addition to terra sigillata ware, which will be discussed later, Italy supplied many luxuries which the well bred Roman considered indispensable, such as art products, silverware, ornaments and jewelry of all kinds.²⁷ The soldier preferred a Roman cuirass and a

²¹E. E. Hudemann, Geschichte des röm. Postwesens (Berlin, 1878), pp. 107 f; Otto Hirschfeld, Die Kaiserlichen Verwaltungsbeamten (Berlin, 1905), p. 204.

²²W. B. McDaniel, Roman Private Life and Its Survivals (New York, 1929), pp. 169 ff.

²³Wagner, Die Römer in Bayern, plate XIV.

²⁴Ibid., plate XV. See also Koepp, III, 54, plates XLI, 5, XLII, 1.

²⁵Draxel, Germania Romana, V, 9, plate VI, 5.

²⁶Vollmer, No. 311B and plate 74.

²⁷Friedländer, III, 87; Heinrich Willers, Neue Untersuchungen von Niedergermanien (Hanover and Leipzig, 1907), p. 29.

made-in-Italy set of arms. From Gaul came a gigantic volume of terra sigillata ware, some of which was carried through Raetia, and enameled jewelry, which also found its way into the entire Rhine area and England.²⁸ Raetia must have imported some salt from Noricum, where the salt ships came down the Salzach and Inn to the Danube, thus following the boundary of Raetia on the Inn.²⁹ Two literary references of interest here show that commercial contact was maintained with the barbarians north of Raetia, and in each case it was undoubtedly a give-and-take transaction, that is, involving export and import. One of these refers to the favored-nation agreement between the Romans and the Hermanduri in the first century, which the other German tribes resented so much.³⁰ In the other reference Tacitus laments the fact that Roman merchants, because of the "ius commercii" and the cupidity for gain, were established in the fortress of Marbod, the Marcomannic chieftain, and as a result had forgotten their fatherland.³¹ Although their number cannot have been very large, these pioneers of trade must have stimulated commerce. The cache of twenty-two Byzantine coins at Frickingen on the Feimingen-Oberdorf road was buried there either by a merchant or some traveler.³² Some of the Attic vases, dating from the middle of the fifth century B. C. (principally the second and third quarters of the century), must have been transported through Raetia.³³ Thus some of the goods transported through Raetia were transmitted over great distances before they reached their destination. Many commodities also found their way into German hands, we noted on pages 114 and 115 above.

Terra sigillata ware more than any other single product accounted for the volume of trade. The peak in its transportation was reached in the first two centuries, but even after that a great amount must have been shipped in to meet the demand. At

²⁸Kisa, I, 159. ²⁹Victor Hehn, Das Salz (Berlin, 1901), p. 5.

³⁰Tacitus Germ. 41. Cf. supra, p. 70.

³¹Tacitus Hist. 11. 62.

³²Friedrich Hertlein and Peter Gössler, Die Römer in Württemberg (Stuttgart, 1928-32), II, 219.

³³Paul Jacobsthal ("Bodenfunde griechischer Vasen nördlich der Alpen," Germania, XVIII, 14-19) believes that all such vases north of the Alps came into this area via Upper Italy and the Alps.

first Arretine ware was imported from Italy. Then other Italian pottery followed until about the middle of the second century, when pottery of provincial manufacture had completely destroyed the Italian trade in this commodity.³⁴ Gallic terra sigillata began to pour into Raetia from southern Gaul in the early first century, and, according to the conclusions of Robert Knorr, reached a peak in the last quarter of the century.³⁵ Much of this ware passed through Raetia and was sold in the lower Danube provinces. Noricum and Pannonia especially received much of this ware over the route which first followed the roads south of the Danube from Windisch, then also from Rottweil, and still later also from Cannstatt, when these shortcuts were opened up. Then the Rhine potters began to crowd the Gallic manufacturers, until finally most of this ware came from Rheinzabern, with Heiligenberg contributing some.³⁶ The peak of this traffic was reached in the last third of the second century. The importation of terra sigillata thus continued, and the product was still sent through Raetia into Noricum and east to modern Hungary and the lower Danube provinces. Westerndorf, near Rosenheim and Pfaffenhofen, was the only known factory of terra sigillata in Raetia.³⁷ This factory was a branch of the Rheinzabern and Heiligenberg plants, but the Raetians themselves always preferred the better article from there to the Westerndorf product. No traces of the Westerndorf product have been detected on the limes. Even Augsburg and Regensburg produce practically no Westerndorf pottery, although a vessel of this type has been found at Günzburg.³⁸ Favored by its location on the main

³⁴ Dragendorff, "Provinciale Keramik," II Bericht d. röm.-germ. Kom., pp. 91 f.; Willers, Die röm. Bronzeelmer von Hemmoor (Leipzig, 1901).

³⁵ Töpfer u. Fabriken verziert. Terra-Sigillata d. I. Jahrh. (Stuttgart, 1919), p. vi; "Terra Sigillata von Geislingen, Rottweil und Heidenheim," Fund. a. Schwaben, XVIII, 43. A good impression of the time, volume, and area of distribution can be gained from a cursory glance through F. Oswald and T.D. Pryce, Terra Sigillata (London, 1920), pp. 78 ff.

³⁶ Dragendorff, II Bericht d. röm.-germ. Kom., p. 92; E. Fölzer, "Provinciale Keramik," IV Bericht d. röm.-germ. Kom., p. 77; Knorr, "Westerndorf Sigillata," Fund. a. Schwaben, XIV, 88, n. 1.

³⁷ Hefner, "Die Töpferei in Westerndorf," Oberbair. Archiv., XXII, 1 ff.; Knorr, Fund. a. Schwaben, XIV, 73-90.

³⁸ Fölzer, loc. cit.; Dragendorff and Krüger, "Museographie," V. Bericht d. röm.-germ. Kom., p. 58; Knorr, Fund. a. Schwaben, XIV, 81 f.; Hefner, Oberbair. Archiv., XXII, 6.

highway east, this factory disposed of its inferior product by supplying the less discriminating demands east of Raetia. Finds have been made at Salzburg (Iuvavum), Lorch (Laureacum), Osterhofen, and Carnuntum, west of Vienna. The activity of the Western-dorf potters was restricted to the last half of the second century; thus its commercial influence was greatly limited also in this respect.

Within Raetia many crafts and industries flourished which contributed to the commercial development of the province. In the capital of Augsburg were cloth merchants, a dealer in purple cloth, pottery and metalwear dealers, a butcher shop for pork, and an ambitious delicatessen proprietor who advertised his product of mackerel fish-sauce by placing an advertisement on the containers, as our modern milkmen do.³⁹ Dealers in frankincense are mentioned in an inscription from Regensburg.⁴⁰ And at Günzburg the millers honored Neptune with an altar erected in his name.⁴¹ Inscriptions which merely designated the donors as merchants were recorded at Augsburg and Bregenz.⁴² The discovery of a potter's shop at Gauting, on the fork of the Bregenz and Augsburg roads on the main east-west highway, gives us a good impression of the well stocked potter's shop.⁴³ This dealer's supply of over two hundred and fifty pieces of merchandise was neatly arranged along the wall on shelves according to size. Forty-seven vessels were found intact.

The inscriptions also mention men from outside Raetia who were not soldiers, but must have been merchants.⁴⁴ Among these are a merchant from Treves at Augsburg, a native of the Bituriges from central Gaul at Augsburg, a native of Lyons at Augsburg, a

³⁹Vollmer, No. 111: vestiariae et lintariae (clothes and linen merchant); No. 127: vestarius (clothes dealer); No. 135: negotiator artis purpuriae (merchant of purple cloth); No. 144: ars cretaria et flaturaria (dealer in pottery and metalcraft); No. 175: porcarius (butcher shop for pork); No. 175B: "Liquamen scombri excellens M. Valeri Maxumi" on the side of an amphora (excellent mackerel sauce from the shop of M. Valerius Maximus).

⁴⁰Vollmer, No. 360: negotiatores tuararii (dealers in frankincense).

⁴¹Vollmer, No. 198: molinarii (millers).

⁴²Vollmer, No. 141 (Augsburg); No. 74 (Bregenz).

⁴³Wagner, "Fundchronik," Germania, XIV, 236.

⁴⁴Cf. Friedländer, I, 375, n. 3.

Greek at Augsburg, a Spaniard at Hausen on the northern side of the Danube, and another citizen from Treves at Neuburg on the Danube.⁴⁵

Only two other professions are mentioned specifically by name in the inscriptions. At Rotthof an actor is mentioned, and at Regensburg two eye-doctors (medici ocularii).⁴⁶ A vivid relief from Regensburg records the activities of a dealer in wine.⁴⁷ The gladiator mosaic of Augsburg would suggest that this profession was also represented, unless the mosaic was a mere decoration to remind the owner of the shows he had witnessed elsewhere.⁴⁸ All professions needed for daily life were undoubtedly at hand, such as doctors, lawyers, draftsmen, architects, dealers in building material, engineers, and the like.

One of the really big industries in Raetia was quarrying and all of its related activities. The product of the quarry supplied a constant demand for use on the roads, buildings, memorials, monuments in the cemeteries, votive tablets, and milestones. These demands assured a steady occupation for all types of work with stone from quarrymen to skilled sculptors.⁴⁹ Jura limestone and various kinds of sandstone were the cheapest and most available, and therefore most in demand.⁵⁰ Marble was also used for the costlier buildings and for finer specimens of sculpturing, but little of this has come down to us from Raetia. The lime burners and greedy contractors reduced most of the marble into lime or employed the stone for new building operations. A glance through the pages of Vollmer shows that many inscriptions in limestone and sandstone suffered the same fate. Many inscriptions were salvaged in the last century from modern churches.

⁴⁵ Augsburg: Vollmer, No. 108 (Treves), No. 142 (native of the Bituriges), No. 135 (a Greek), No. 143 (Lyons); Hausen: Vollmer, No. 203 (a Spaniard); Neuburg: Vollmer, No. 236 (Treves).

⁴⁶ Actor: Vollmer, No. 437; medici ocularii: Vollmer, Nos. 423A, 423B.

⁴⁷ For a good picture, see Wagner, Die Römer in Bayern, plate XIV.

⁴⁸ Vollmer, No. 147.

⁴⁹ A relief from Augsburg (Wagner, Die Römer in Bayern, plate VIII) shows a workman carrying a stone on his shoulders.

⁵⁰ For varieties of sandstone and their source, see Paret, pp. 155 f.

The development of sculpturing in Raetia is closely related to the coming of the Roman soldier. The use and form of this art thus received a definite direction. The Kelts were very little interested in sculpturing, and it is doubtful whether they did anything at all along this line. The interpretation of the plastic arts in Raetia offers many difficulties; yet certain observations can be made without question.⁵¹ Most of our specimens come from the Augsburg and Regensburg area, where military and civil officialdom was centered. The military influence apparently predominated, since the military camps contribute practically all we have.

In the early period important statues in the temples and public buildings followed the Roman models very closely. Many were undoubtedly imported, or directly patterned after Italian models. In the course of time native sculptors were found, and from the end of the second century onward a change can be noted. Reliefs placed by civilians become more frequent, and with these a richer and fuller presentation of scenes from daily life. Mythological scenes never met with great favor in Raetia. That the native population did not bow completely to Roman ideals is forcefully shown in a relief from Regensburg.⁵² The man who erected this grave memorial must have had means at his disposal; yet he preferred to have himself, his wife, and servants represented in native garb. The adherence to Roman ideals is on the whole much less observed in sculpturing than in architecture, while the native influence was lost to a very large extent. Reliefs and sculpturing in the round were painted in accordance with the general practice of the ancient Greek and Roman world.⁵³ Little can be done in the way of comparing the cost of memorials and statues erected in

⁵¹See Koepp, Germania Romana, III, 1 ff.; "Röm. Bildkunst am Rhein und an der Donau," XIII Bericht d. röm.-germ. Kom., pp. 13 ff.; Die Römer in Deutschland (Bielefeld and Leipzig, 1926), pp. 162-64, 174; Wagner, Die Römer in Bayern, pp. 89 ff.; Kisa, I, 237.

⁵²For two views of the relief, see Wagner, Die Römer in Bayern, plate XII. Not too much should be deduced from this and several other similar examples. The number of errors in the inscriptions (Vollmer, p. 240) for all of Raetia is strikingly small for the hundreds of specimens. The frequency of grammatical irregularities (Vollmer, p. 236) leaves about the same impression.

⁵³Paret, p. 113.

Raetia with those found in other parts of the Roman Empire.⁵⁴

The auxiliary soldiers are usually presented in full military regalia, while the legionaries showed a preference for a less military appearance. The former are also commonly shown in action, while the latter are always found at rest. The bust or a half figure is most popular, as was the case in the Danube area generally. Few life-size figures have been found. Soldiers on horse are always shown in action, but the enemy whom the soldier is charging is missing. This type is not numerous in Raetia.⁵⁵ Here the sculptor followed the general practice of the Danubian provinces, while in the Rhine area the fallen enemy is pictured under the horse.

The manufacture of clay products must also have been one of the major industries in Raetia, if it was not the largest. The product of this industry was put to many uses, and the fragile nature and the daily use of the article meant that replacements were constantly needed. The greatest demand was for bricks and kitchen utensils. Although the army manufactured *tegulae* for civilian use, nevertheless the production of bricks by civilians was necessary to meet the demand. The common clay vessels apparently were manufactured principally by private interests. Brick kilns and pottery kilns must have been found in every city and many of the smaller villages.⁵⁶ In some cities the archaeologists

⁵⁴Cf. Friedländer, III, 304 ff., 314 ff. The Epfach memorial (Vollmer, No. 90) erected at a cost of 6,000 sesterces by a daughter in honor of her father compares quite favorably with others of medium cost in Friedländer's list. Other monuments on which the cost is recorded are: Münster, 4,000 sesterces (Vollmer, No. 426); Augsburg, 1,600 sesterces (Vollmer, No. 128); Derching (at Augsburg), 1,400 sesterces (Vollmer, No. 176); Augsburg, 400 sesterces (Vollmer, No. 131).

⁵⁵Wagner, Die Römer in Bayern, p. 92; Koepp, Germania Romana, III, 16.

⁵⁶Twenty-two places of pottery manufacturing have been identified in Württemberg alone (Paret, p. 144). Some of the most interesting finds have been made at Bregenz (Oswald and Pryce, pp. 22-26); Emerkingen (Burkhardt, "Emerkingen: Töpferöfen," Fund. a. Schwaben, XVIII, 28 f.; Gössler, "Museographie," VII Bericht d. röm.-germ. Kom., pp. 84 f.); Dünzling (Drexel, VII Bericht d. röm.-germ. Kom., p. 55); Mertingen-Draisheim (Drexel, "Bericht über d. Tätigkeit der röm.-germ. Kom.," XV Bericht d. rom.-germ. Kom., p. 245); Kempten (Reinecke, Germania, XIII, 148 ff.); Straubing (Keim, Germania, XV, 280); Ristissen (Paret, p. 142). Cf. Drexel, Germania Romana, Vol. V, plate XXXI.

have been successful in finding a number of them; thus six at Emerkingen, a brick factory and two potteries at Kempten, and seven brick kilns at Straubing. Finds in the Swiss part of Raetia are rare.⁵⁷ Oval (Dünzling) and horseshoe shaped (Emerkingen) kilns have been found. The ware most commonly produced was red, yellow, grey, and black. The manufacture of terra sigillata, which was very limited in Raetia, has been discussed above.⁵⁸ Many other products of clay, as tiles, lamps,⁵⁹ and toys⁶⁰ should be noted.

Numerous glass articles, such as plates, bowls, bottles, flasks, jars, cinerary urns, mirrors, lamps, and window panes show that the manufacture of glass was a live factor in the industrial activities of the province. The industry developed late in Raetia, possibly in the last half of the second century.⁶¹ By this time Köln, in the Rhine valley, had developed into a recognized center of the industry. The most popular colors were various shades of blue, greenish yellow, and an opaque dark green. The known processes of manufacture included blowing and pulling the glass while it was still hot.⁶² Glass mirrors are rare.⁶³

⁵⁷Stähelin (p. 416) lists a pottery at Eschenz (Tasgaetium). A large pottery and warehouse were excavated near Bern. Some have raised the question whether this may not be the source of many clay products sent into Raetia during the second century. Much remains to be done in the recovery of pottery sites in Switzerland, and more sites will be identified as research progresses.

⁵⁸Supra, pp. 126 ff.

⁵⁹For pictures of clay lamps, see Knorr, "Röm. aus Riss-tissen, Unterkirchberg und Strass," Germania, XIX, 143. Nineteen lamps were found in a cemetery at Reichling (Wagner, "Fundchronik," ibid., XVIII, 141). Some lamps have been baked with a finish similar to that of terra sigillata (Dragendorff and Krüger, V Bericht d. röm.-germ. Kom., p. 57).

⁶⁰Rooster: E. Krüger, "Museographie f. d. Jahr 1907/8," IV Bericht d. röm.-germ. Kom., p. 45; man and horse, woman and horse, parts of about six horses and other animals: Paret, p. 167; toys: Steinmetz, "Fundchronik," Germania, XVIII, 294.

⁶¹Kisa, I, 253; Drexel, Germania Romana, V, 16.

⁶²A window pane from Donnstetten (Paret, III, 60) shows the latter process very clearly. The four corners are rounded and show the marks left by the tongs with which the glass sheet was pulled. The edge is thicker than the center of the pane (5 mm., while the plate is 2 mm.).

⁶³Lamprecht, Verh. d. hist. Ver. von. Oberpfalz u. Regensburg, LVIII, 16.

A fine specimen of a glass goblet (cup) was found at Augsburg.⁶⁴ The sides are embellished appropriately with a sketch of Bacchus with a retinue of retainers, surrounded by a large cluster of grapes. Traces of the original enamel give a hint of its former beauty. Glazed ware was also manufactured, but only bits have come down to us.⁶⁵

The lumber business also must have been a well developed industry. As in the case of agriculture, our information is based primarily on assumptions, since most of the wood has been destroyed. The soldiers and civilians found an abundant supply in the forests of Raetia. Wood was the basic material of most homes, and even stone buildings had doors, floors, trimmings, and roofs made of wood. Wood shingles have been found at various places. Even the road builders employed timbers from the forest to gain a firm foundation in wet and swampy places. Wells and springs, as we have seen, and even drain pipes created a demand for the industry.

The final major industry of Raetia included the metalcraft workers of bronze, iron, and the precious metals.⁶⁶ Bronze-smiths plied their trade in Raetia long before the Romans came in.⁶⁷ The Romans demanded many articles in bronze for use in their military and civil pursuits of life. Among these are statuettes of deities, letters for inscriptions on buildings, plaques, braziers, pots, pans, buckets, lamps, fibulae, tools, chains, bells, scale armor,

⁶⁴ Reproduced in Drexel, Germania Romana, Vol. V, plate XXII, 1.

⁶⁵ Ohlenroth, "Fundchronik," Germania, XVI, 150; Stähelin, p. 416.

⁶⁶ Thousands of articles made of metal are on display in the museums of Germany in the Rhine and upper Danube areas. Detailed lists of current finds are recorded periodically in Germania and Berichte d. röm.-germ. Kom. under the headings of "Fundchronik" and "Museographie." See also Haug and Sixt; Paret, Vol. III; Ohlenschläger, Die röm. Überreste in Bayern (München, 1902-10); Germania Romana: Ein Bilder-Atlas. For good reproductions of articles in bronze and iron, see Germania Romana, Vol. V; bronze head of horse: Wagner, Die Römer in Bayern, plate IV; bronze letters and decorations: Vollmer, plate 59; bronze standard: Vollmer, plate 73; bronze Genius: VII Bericht d. röm.-germ. Kom., p. 34; bronze Serapis and Lar: ibid., p. 35.

⁶⁷ A good discussion and a good example of the bronze-smith's shop at München is to be found in Ernst Brug, F. Weber, and Ad. Schwager, "Eine bronzzeitliche Gusstätte a. Münchener Boden," Beit. z. Anthr. u. Urg. Bayerns, XIII, 119 ff.

diplomata, weights, rings, discs, and ornaments. One of the most artistic statuettes is a bronze cast of Jupiter found at Gmünd.⁶⁸ Another example which ranks high from the artistic point of view is the bronze head in natural size found at Augsburg.⁶⁹ The fragment is all that remains of possibly an imposing statue of an emperor which graced a public square or a public building in the capital. These were perhaps imported from Italy, as was much of the finer work among the statuettes of deities. The bronze buckets from Raetia were also undoubtedly imported, possibly from the center of manufacture on the Rhine.⁷⁰ Some of the skilled smiths apparently found it a risky, but lucrative, business to counterfeit Roman coins.⁷¹ There was no Roman mint in Raetia.

The soldiers were the greatest promoters of the iron industry. Weapons of all kinds are always found in the castella. Iron was also used for horseshoes, tools, implements, and lamps. The popularity in which Jupiter Dolichenus was held has led some to conclude that iron mining was carried on in Raetia, but little evidence can be mustered in support of that view. The workshop of a smith has been found at Heidenheim.⁷² The shop was heated by a hypocaust system, and the smelting hearth was found in the same condition in which it had been used. Fuel and chunks of metal were at hand, just as if the workmen had left the shop for the night to return on the following day, which never came. One of the smelting pots showed that gold had been melted in it.

The arts of metalcraft afforded artisans an opportunity to use their skill in the making of jewelry. Thousands of articles have been recovered in the cemeteries, the ruins of homes, in the castella, and on the highways. Precious metals and costly

⁶⁸ Paret, "Gmünd, Röm. Bronzestatuetten," Fund. a. Schwaben, N. F. III, 116 f.

⁶⁹ Wagner, Die Römer in Bayern, plate IV.

⁷⁰ Willers, Die röm. Bronzebecken von Hemmoor, pp. 64, 112 f., 137, 184, 214; Neue Untersuchungen u. d. röm. Bronzeindustrie von Capua u. von Niedergermanien, pp. 9, 11 ff., 35, 42 ff., 48, 85, 90.

⁷¹ A counterfeiter's shop at Ristissen (Paret, Fund. a. Schwaben, III, 159) was well equipped and stocked for his illegal trade of making counterfeit denarii. He was active at 218, or shortly thereafter. Lumps of alloy are of the correct proportions for the coins of that time. For a picture of the counterfeiter's die, see Blümlein, p. 92.

⁷² Paret, Fund. a. Schwaben, III, 158.

stones were available for the rich, while the poor gratified their desires with articles of bronze, or even iron and glass. A lucky find at Rembrechts included heavily worn articles of silver, such as five rings--two of which were double--two bracelets, three necklaces, four crescent shaped ornaments, ornamental discs, a buckle, a bronze pin, three bronze rings, and glass beads.⁷³

Fibulae of every size and shape, and mostly of bronze, have been retrieved. One of the most famous from Raetia is the one shaped like a W, which bears the inscription, "Spes amor si me amas."⁷⁴ Enamel was frequently used to take the place of precious stones. Engraved gems set in gold or silver were undoubtedly some of the most highly prized bits of jewelry.⁷⁵

There still remains for our discussion of Roman life another phase, a phase which reveals a deep feeling of the heart, and that is religious life. Religion was a serious matter to the ancient people, although formal ritualism at times appeared cold. When Death appeared at a fireside and carried away a loved one, the human heart was stirred profoundly. Then the words, though chiseled in cold stone, reflected a sentiment which rang true. When a beloved wife was carried away, frequently in the prime of life, then there was little exaggeration in such superlatives as "dulcissima," "carissima," "diligentissima," "rarissima," "optuma," "incomparabilis," "fidelissima," "reverentissima," "innocentissima," and "sanctissima."⁷⁶ The phrasing on the inscriptions shows this was not dead formalism. Or when Death entered the home

⁷³Paret, "Der röm. Schatzfund von Rembrechts O-A. Tettang," Germania, XVIII, 194 ff.

⁷⁴Haug and Sixt, No. 614, p. 681; Drexel, Germania Romana, V, 11, and plate XV, 3. The latter has pictures of the conventional types of fibulae on plates X and XI.

⁷⁵Some of the best specimens are the following: Aalen, an agate with the sun god engraved on it, and set in a silver ring (Miller, Die röm. Kastelle in Württemberg [Stuttgart, 1892], p. 36; Haug and Sixt, No. 58, p. 123); Isny, a gold ring with a sphinx and Oedipus engraved in an onyx (Miller, p. 44); Mengen, a carnelian engraved with a bearded head, probably Marcus Aurelius (Haug and Sixt, No. 16, p. 47); Oberböbingen, a woman, undoubtedly Ceres, sacrificing, is engraved on a stone of jasper (*ibid.*, No. 507, p. 128); Heubach, the sun god in a chariot with quadriga (*ibid.*, No. 509, p. 133); Risstissen, a carnelian of finerworkmanship than the others which shows a soldier in arms (*ibid.*, No. 618, p. 683); G. Bersu, "Risstissen," Fund. a Schwaben, XXI, 67.

⁷⁶Vollmer, pp. 233 f.

of Tiberius Claudius Constantinus and his wife Cassica Vera at Neuburg and carried away the namesake of both parents, Tiberius Cassius Constantinus Junior, at the tender age of three years, four months, and twenty-two days, then there is pathos in the tender appeal to the "Dis Manibus" and "Perpetuae Securitati," and the tender reference to "filius miserrimus" and "dulcissimus."⁷⁷ And the fact that all was recorded on humble limestone, even though father, mother, and all living members joined in placing the memorial, adds to the warmth of the sentiments expressed. Another wish frequently expressed is that the earth may rest lightly on the departed ("Sit tibi terra levis").⁷⁸ Not only were the actual days of life given for children, but the very days were recorded also for the aged. Secundinius Serotinus at Epfach enjoyed life for fifteen days beyond his ninety-first birthday.⁷⁹ Attachment to the dead is also shown in the banquet scenes with the departed ones.⁸⁰

The interpretation of religion in a Roman province is beset with a multitude of unique difficulties, for the reason that it is composed of many elements which in turn are very elusive.⁸¹ There is, first of all, the native religion of Raetia, of which very little is known. Perhaps the Keltic religion of Gaul was most dominant. Traces of very ancient cults have been found on the ridges of the Alpine passes. The Anauni celebrated a festival in honor of Saturn in May.⁸² The worship of native gods continued, and was not entirely discontinued until Christianity gained supremacy in Raetia. The interpretatio Romana has been given much consideration, and yet it is one of the most difficult things to establish. The general masses undoubtedly clung to their old gods, even if they used Roman names. Religious feeling is deeply grounded, and where new gods could be freely added to the old ones--as was the case in the non-exclusive pagan cults--it was

⁷⁷Vollmer, No. 233. ⁷⁸Vollmer, Nos. 260B, 381, 397.

⁷⁹Vollmer, No. 89.

⁸⁰Wagner, Die Römer in Bayern, plates IX, XI.

⁸¹For a good discussion of sources and bibliography, see Drexel, "Götterverehrung im röm. Germanien," XIV Bericht d. röm.-germ. Kom., pp. 1-4.

⁸²Theo Mommsen, "Edict des Claudius," Hermes, IV (1870), 100 f.; Julius Jung, Die Romanischen Landschaften (Innsbruck, 1881), p. 425, and Römer und Romanen (Innsbruck, 1887), pp. 162 f. For temples of gods on Alpine passes, see Stähelin, pp. 328, 338, 340, 356, 362.

easy to use the name of a god and endow him with the attributes of a native god. We will note this characteristic of religion as we discuss the individual gods. Apollo and Mercury suffered most, it seems, but Jupiter was not spared. Frequently the native god lurking behind the Roman name can be detected. Sometimes the name is outright un-Roman, as Epona, Sedatus, and Rosmerta. Sometimes the cognomen reveals the real god the devotee had in mind, as Grannus with Apollo, and Arcecius with Mercury. Then, too, un-Roman combinations show a native interpretation of Roman gods, as Mars-Victoria, Apollo-Grannus-Sirona, Mercury-Apollo-Minerva. Sometimes the place where an inscription was placed, or the name of the person who absolved his vow show what god was meant. A dedication to Jupiter at Pfünz, or placed anywhere by an iron-worker, may not be dedicated to Jupiter at all but to the oriental Jupiter Dolichenus. To add to the confusion, the regular Roman forms were usually adopted also for the inscriptions dedicated to the native gods. The "dis Manibus" and the "in honorem domus divinae," which became popular after Commodus, are set phrases frequently found in Raetia.

The second great difficulty in the interpretation of religion in the Roman provinces is the complex nature of the new religion. The Roman and Italian gods and the peregrine cults known in Rome and Italy were brought in by the Romans--soldiers, officials, merchants, and settlers. But the influx of foreign cults did not stop with that. New cults were constantly finding their way in, not by way of Rome, but directly through soldiers and merchants. The transfer of a military unit from the East or the coming of traders from the four corners of the world usually added new gods to the crowded company of deities.

The most popular Roman god in Raetia was Jupiter, and a striking fact is that almost all of his inscriptions seem to come from soldiers or officials. The name of the military unit is frequently included, or the inscriptions hail from a camp site. The locations of sites include Augsburg, Gundelfingen, Nassenfels, Neuburg, Weissenburg, Göhren, Regensburg, Baumgarten, and Wernstein (Passau).⁸³ An inscription placed by the Raeti Gaesati at

⁸³ Augsburg: Vollmer, Nos. 96, 99; Gundelfingen: Vollmer, No. 212; Nassenfels: Vollmer, Nos. 239, 251; Neuburg: Vollmer, No. 252; Weissenburg: Vollmer, Nos. 314, 315; Göhren: Vollmer, No. 327; Regensburg: Vollmer, No. 358; Baumgarten: Vollmer, No. 433; Wernstein (Passau): Vollmer, No. 440.

Jedburgh, England, is dedicated to Jupiter, while the Gauls in England made their dedications to the Genius loci, and the Germans in England remembered their native gods.⁸⁴ Bronze statuettes of Jupiter, which were undoubtedly imported, as their fine craftsmanship seems to indicate, were found at Ehrenstein, Passau, Gmünd, and Augsburg.⁸⁵ Jupiter pillars, which were developed by Germans on Celtic soil along the middle-Rhine, were possibly erected in Raetia at Niederstotzingen and Weissenburg.⁸⁶ If these identifications are correct, then they are the only ones found so far from their place of origin.⁸⁷

Jupiter appears not only as Jupiter Optimus Maximus in his own right, but also very frequently in combinations with other gods. Sometimes he is associated with "gods" and "goddesses" without any specific identification, as at Augsburg and Nassenfels.⁸⁸ Only one inscription bears the names of the thoroughly Roman Trias Capitolina,⁸⁹ while another mentions them with a Genius cohortis.⁹⁰ Jupiter and Juno Regina are combined in two inscriptions from Niederstotzingen and Pfelling.⁹¹ Juno alone is found only once in Raetia.⁹² Jupiter, Juno, Fortuna, the crossroad gods, and possibly the Lares are combined in an inscription from

⁸⁴ Ephem. Epig., Vol. VII, No. 1099; Alf. v. Domaszewski, Die Religion d. röm. Heeres (Trier, 1895), No. 78, p. 45; Dragendorff, Westdeutschland zur Römerzeit (Leipzig, 1919), pp. 106 f.

⁸⁵ Ehrenstein: Haug and Sixt, No. 25, p. 76; Koepp, Germania Romana, IV, 62, plate XL, 2 (three views); Drexel, VII Bericht d. röm.-germ. Kom., p. 70; Paret, "Gmünd Röm. Bronzestatue des Jupiters," Fund. a. Schwaben, N. F. III, 116 f.; Augsburg: Drexel, loc. cit., p. 33.

⁸⁶ Haug and Sixt, No. 28, p. 80; Paret, Fund. a. Schwaben, III, 351. For discussion of the whole problem, see Gustav Behrens, "Zur Frage der Juppitergigantensäulen," Germania, XVI, 28 ff. Koepp, XIII Bericht d. röm.-germ. Kom., pp. 32 ff.; Hertlein, Die Römer in Württemberg, I, 139; "Die Entstehung des Dekumatenlandes," Klio, XXI (1927), 41. Types of the Igel monument have been detected at Augsburg and Regensburg (Koepp, Germania Romana, Vol. III, plates XXV, 4; XLI, 1, 3, 5; XLIV, 4).

⁸⁷ The number found in Upper Germany was increased by one in the excavations at Cannstatt in 1924 (Paret, "Ein grosser Fund röm. Bildwerke in Cannstatt," Germania, IX, 6).

⁸⁸ Augsburg: Vollmer, Nos. 97, 98; Nassenfels: Vollmer, No. 241.

⁸⁹ Glött: Vollmer, No. 210. ⁹⁰ Eining: Vollmer, No. 334.

⁹¹ Niederstotzingen: Vollmer, No. 200; Pfelling: Vollmer, No. 429.

⁹² Ebrantshausen: Vollmer, No. 352.

Regensburg.⁹³ Minerva, the third member of the triad, is never mentioned alone in inscriptions, but soldiers and craftsmen were fond of bearing images of the goddess on their person.⁹⁴ Other combinations bring together Jupiter, Genius, "gods" and "goddesses" at Augsburg, Jupiter and the Danube god at Risttissen.⁹⁵ Only one inscription mentions Jupiter Optimus Maximus Stator, and this was placed by a centurion of the legio III Italica to absolve his vow after he had returned safely from an expedition against the Buri.⁹⁶ On the borders of Raetia Jupiter received a local interpretation. Popular shrines of an age-old cult in honor of Jupiter Poeninus thrived on the ridges of the passes in the Poenine Alps.⁹⁷ Along the eastern border, in Noricum, he became Jupiter Optimus Maximus Arubianus and was combined with Bedaius, a god named after the city.⁹⁸ Here too he was worshipped in conjunction with a Genius loci.⁹⁹ Jupiter Dolichenus was really an oriental god, and therefore will be included in the discussion of the oriental cults below.

Mars and Victoria, who constitute the dii militares together with Jupiter,¹⁰⁰ seem to have been worshipped by soldiers almost exclusively. Mars alone and without any cognomen is mentioned in two inscriptions, at Augsburg and Nassenfels; he appears on a relief from Bürg on the Kocher; and a head of Mars has been found at Aalen.¹⁰¹ In an inscription from the valley of the Elsack he is characterized as "Augusto conservatori corporis

⁹³Regensburg: Vollmer, No. 420B.

⁹⁴"MIN" on silver ring at Schierenhof: Vollmer, No. 298A; two heads on bronze tin at Buch: Haug and Sixt, No. 490, p. 113; head on bronze tin at Aalen: ibid., No. 57, p. 121; bronze head at Augsburg: Drexel, VII Bericht d. röm.-germ. Kom., p. 33; fragments of statuette at Buch: Haug and Sixt, No. 488, p. 112.

⁹⁵Augsburg: Vollmer, No. 98; Risttissen: Vollmer, No. 192. It is very doubtful whether the name of Jupiter can be restored in an inscription from Faimingen (Vollmer, No. 215) where Apollo Grannus, Sacred Hygeia, Mother of gods is mentioned.

⁹⁶Untersaal: Vollmer, No. 353.

⁹⁷Stähelin, pp. 228 ff. ⁹⁸Vollmer, Nos. 20, 25.

⁹⁹Vollmer, No. 20A.

¹⁰⁰Domaszewski, Die Religion d. röm. Heeres (reprint),

p. 4. ¹⁰¹Augsburg: Vollmer, No. 100; Nassenfels: Vollmer, No. 242; Bürg: Paret, Fund. a. Schwaben, III, 179; Aalen: Haug and Sixt, No. 57, p. 121.

sul."¹⁰² To what extent Mars stands on his own, and to what extent he was the Keltic god Esus cannot be determined definitely.¹⁰³ The soldiers seem to have preferred the identification of Esus with Mars, while the merchants preferred to identify him with Mercury. The auxilia also worshipped Mars, as inscriptions from veterans of the auxilia show. We have more inscriptions from Raetia in which Mars and Victoria are combined than of Mars alone. Although this combination developed late, it was very popular in this province.¹⁰⁴ Inscriptions have been recovered at Augsburg, Nassenfels, Regensburg, and Gingen, while statuettes of the two gods were excavated at Eining.¹⁰⁵ The Nassenfels inscription was placed by "vikani," who perhaps were mostly veterans, or at least greatly influenced by the soldiers of the camp. A Regensburg inscription shows that the temple was restored by a veteran in 211 A. D.¹⁰⁶ One of the most illuminating inscriptions is one from Augsburg on which a "contubernium Marticultorum" is mentioned, showing that the worship of Mars had developed into an organized cult.¹⁰⁷ Victoria was worshipped alone at Weissenburg and Eining.¹⁰⁸ The goddess was also worshipped as Victoria Augusta.¹⁰⁹ The Mars-Diana combination is not found in Raetia.

¹⁰²Vollmer, No. 59.

¹⁰³Drexel, XIV Bericht d. röm.-germ. Kom., pp. 12 f.; Domaszewski, p. 34.

¹⁰⁴Drexel, XIV Bericht d. röm.-germ. Kom., p. 50; Domaszewski, p. 80.

¹⁰⁵Augsburg: Vollmer, Nos. 101, 173; Nassenfels: Vollmer, No. 243; Regensburg: Vollmer, Nos. 359, 364 (No. 365 may refer to the two gods, but this restoration is very uncertain); Gingen: Vollmer, app. 6; Eining: Reinecke, Festschrift z. Feier des fünf-hundertj. Bestehens des röm.-germ. Central-Museums zu Mainz, p. 161.

¹⁰⁶Vollmer, No. 359. ¹⁰⁷Vollmer, No. 101.

¹⁰⁸Weissenburg (silver plate with inscription by a curator turmae): Vollmer, No. 321; Eining (found near the drill hall of the camp): Vollmer, No. 348. Vollmer, No. 66 (at Mals) may be in honor of Victoria, but the "VIC" cannot be identified with Victoria for certain, although it is very probable. A bronze disc representing Victoria standing before an altar was found at Straubing (Keim, "Fundchronik," Germania, XVII, 297).

¹⁰⁹Rotthof (Griesbach): Vollmer, No. 436; and on the eastern border of Raetia at Prutting (Rosenheim): Vollmer, No. 5; Kirchberg (Reichenhall): Vollmer, No. 49; Haselpach area: Vollmer, No. 56.

The camps of soldiers have produced most references to Fortuna, the goddess of military success, as at Nassenfels, Böhming, Aalen, Theilenhofen, Weissenburg, Eining, Untersaal, and Regensburg.¹¹⁰ Three inscriptions bear dedications to Fortuna Augusta. A Mercury-Fortuna combination appears on the Untersaal inscription, while at Regensburg the goddess is mentioned with Jupiter Optimus Maximus, Juno Regina, the crossroad gods, and others. At Theilenhofen Fortuna and the thoroughly Roman "Genius huius loci" are found in a very fragmentary inscription.¹¹¹ The goddess was honored by the citizens ("vikani") at Eschenz, the only definitely known instance in Raetia where civilians did this.¹¹²

The lack of legionary soldiers in the first two centuries is perhaps the reason why many of the protecting spirits show very strong characteristics of native gods. The crossroad gods appear as Triviae and Quadriviae, pure Keltic goddesses, in place of the Roman Lares Compitales.¹¹³ No Triviae and Quadriviae are found in Rome and Italy. Purely native goddesses were worshipped in the Campestres, protectors of the drill grounds, and Epona, goddess of the stable and the post service.¹¹⁴ A prefect of the ala I Singularium c. R. honored the Campestres and Epona in an inscription placed at Pförring.¹¹⁵ Two likenesses of Epona have been

¹¹⁰Nassenfels: Vollmer, No. 238; Böhming: Vollmer, No. 290; Aalen: Vollmer, No. 301; Theilenhofen: Vollmer, No. 311; Weissenburg: Vollmer, No. 316; Eining: Vollmer, Nos. 345, 346, 349; Untersaal: Vollmer, No. 354; Regensburg: Vollmer, No. 420B. Bronze statuette of Fortuna at Regensburg: Drexel, VII Bericht d. röm.-germ. Kom., p. 72.

¹¹¹The Genius inscriptions from Raetia are rare: Pförring: Vollmer, No. 268; Theilenhofen, Fortuna and Genius: Vollmer, No. 311; Eining: Jupiter Optimus Maximus, Juno Regina, Minerva, and Genius: Vollmer, No. 334; Eining, Vollmer, No. 348 (very uncertain restoration of Genius suggested by Reinecke). Bronze Genius at Augsburg: Drexel, VII Bericht d. röm.-germ. Kom., p. 33.

¹¹²Eschenz: Vollmer, No. 177.

¹¹³Augsburg: Vollmer, No. 109 (the reading is not definite, but a reference to the crossroad gods is certain); Regensburg: Vollmer, No. 420B (with Jupiter Optimus Maximus, Juno Regina, and Fortuna). Cf. Domaszewski, "Die Beneficarii d. röm. Strassennetzes," West. Zeit., XXI, 196, 207.

¹¹⁴For Campestres, see Domaszewski, Die Religion d. röm. Heeres, pp. 50 f.; Drexel, XIV Bericht d. röm.-germ. Kom., p. 38. For Epona, see Domaszewski, Die Religion d. röm. Heeres, p. 52; Drexel, loc. cit., pp. 37 f.; Koepp, Germania Romana, IV, 51.

¹¹⁵Pförring: Vollmer, No. 261. Domaszewski (Die Religion d. röm. Heeres, p. 50) lists seven inscriptions, of which a

found in Raetia, which are the most eastern representations of the goddess on record.¹¹⁶ She is on horse, as she is always represented in the numerous reliefs from Gaul and Germany. The cult may have spread into Raetia from Upper Germany, or may have been brought up from Italy, where it had been carried from Gaul.

The Suleviae, remembered by a woman at Nassenfels, were invoked as protectors of the home and family.¹¹⁷ These goddesses, known also as Matronae, Matres, or Matrae, had their origin among the Kelts of eastern Gaul and Lower Germany. Traces of them are entirely lacking in western Gaul, and become scarce in Upper Germany. The Equites Singulares carried the cult to Rome. With perhaps one exception in Dacia, the inscription from Raetia is the most eastern ever found. The Fates (Parcae), related deities to the Suleviae, were honored in an inscription placed by a man at Augsburg.¹¹⁸

In the case of Sedatus we have another example of how a non-Roman god became a Roman god.¹¹⁹ The cohors I Breucorum introduced this native god of Lower Pannonia who took the place of Vulcan, as an inscription from an altar at Pfünz shows.¹²⁰ Vulcan, however, seems to have been worshipped where the influence of Pannonian troops was not felt; thus at Augsburg and Regensburg.¹²¹ The altar of Augsburg was found in the civil settlement and bears the date of September 1, the day of the Vulcanalium. Here apparently the Roman influence predominated.

The Illyrian Silvanus and Diana, who were worshipped by soldiers detailed to work in forests and by civilians, were not combined in Raetia, as far as our present evidence goes.¹²² Nor is the triad composed of Silvanus, Apollo, and Diana found. Three inscriptions have been found dedicated to Silvanus--one by a

number are found in England, one in Rome, and one in Raetia.

¹¹⁶Koepp, Germania Romana, plates IV; XVIII, 1; XXIX, 2.

¹¹⁷Nassenfels: Vollmer, No. 245. See Drexel, XIV Bericht d. röm.-germ. Kom., pp. 34 ff.; Max Siebourg, "Matronae Terrakotta," Bonn. Jahrb., CV (1900), 94 ff.; Max Ihm, "Der Mütter- oder Matronen-kultus," ibid., LXXXIII (1887), 8 ff.; Koepp, Germania Romana, IV, 19.

¹¹⁸Augsburg: Vollmer, No. 106.

¹¹⁹Domaszewski, Die Religion d. röm. Heeres, pp. 55 f.

¹²⁰Pfünz: Vollmer, No. 273.

¹²¹Augsburg: Vollmer, No. 110; Regensburg: Vollmer, No. 361.

¹²²Drexel, XIV Bericht d. röm.-germ. Kom., p. 50.

citizen of Treves at Augsburg, one at Eigeltingen (Stockach), and one dedicated to Silvanus and Silvana at Pfünz by an honorably discharged soldier.¹²³ Diana was worshipped alone at Messkirch and in the valley of the Ziel.¹²⁴ The dearth of gods who guard over agricultural activities is striking. Perhaps the suggestion offered by Drexel is the correct explanation; to wit, that the work in agriculture was largely performed by men who were not greatly influenced by the process of Romanization.¹²⁵

Some of the most difficult inscriptions to interpret are those referring to Mercury. The god of trade took the place of the most important god among the Kelts and the Germans.¹²⁶ The Gallic merchants readily identified him with their Esus, whose name was dropped. The Roman Mercury was definitely meant, when the dedication was placed by Roman merchants or Roman officials. Whatever god he represented, the number of references to him and the area represented by the dedications show that he was perhaps the most popular god in Raetia next to Jupiter. He is simply called Mercury in inscriptions from Augsburg, Heidenheim, Lauingen, Dünzlau, Emetzheim, Weissenburg, and Gingen.¹²⁷ He appears as "deus Mercurius" at Obergünzburg, Lauingen, and Nassenfels.¹²⁸ It is illuminating to note who placed some of these inscriptions. Appius Claudius Lateranus, a legatus Augusti pro praetore of the legio III Italica, the highest official of Raetia, placed an altar at Augsburg.¹²⁹ The Nassenfels inscription hails from a duplarius of the ala Auriana, and the Emetzheim altar was placed by Flavius Raeticus, an optio equitum of the ala Auriana. Claudia Messorina, the same person who remembered Mars and Victoria, placed the altar

¹²³ Augsburg: Vollmer, No. 108; Eigeltingen: Vollmer, No. 181; Pfünz: Vollmer, No. 274.

¹²⁴ Messkirch: Vollmer, No. 182; valley of the Ziel (altar dedicated by a tax collector of the Quadragesima Galliorum): Vollmer, No. 68. Lower half of a bronze Diana at Augsburg: Drexel, VII Bericht d. röm.-germ. Kom., p. 33.

¹²⁵ Drexel, XIV Bericht d. röm.-germ. Kom., p. 53.

¹²⁶ Caesar B. G. vi. 17; Tacitus Germ. 9; Drexel, XIV Bericht d. röm.-germ. Kom., pp. 12 f., 47.

¹²⁷ Augsburg: Vollmer, Nos. 102, 103, 104; Heidenheim: Vollmer, No. 206; Lauingen: Vollmer, No. 218; Dünzlau: Vollmer, No. 253; Emetzheim: Vollmer, No. 312; Weissenburg: Vollmer, No. 317; Gingen: Vollmer, app. 5.

¹²⁸ Obergünzburg: Vollmer, No. 82; Lauingen: Vollmer, No. 220; Nassenfels: Vollmer, No. 244.

¹²⁹ Vollmer, No. 104.

at Gingen. The inscriptions on both altars are identical, with the exception of the names of the gods. Two silver rings with the letters "MER" engraved on them have been found at Augsburg and Bregenz.¹³⁰ Augsburg, Regensburg, Kempten, Gingen, Bopfingen, Ennetach, and Bürg have surrendered representations of Mercury.¹³¹ A dedication to "Mercurio Augusto" appeared in Augsburg.¹³² A decurio of the ala I Flavia Singularium dedicated his altar at Unteraal to "deo Mercurio et Fortunae Reduci."¹³³ This is the only case we have where Mercury was associated with another deity. His name was never associated with Rosmerta either, a combination which was very popular in the Rhine area.¹³⁴ But in a number of instances Mercury simply received the name of the local god as a cognomen. Thus we have "Mercurius Arcecius" at Bregenz, "Mercurius Censualis" at Regensburg, and "Mercurius Cimiacinus" at Ludenhausen (Epfach).¹³⁵ A beneficiarius consularis of the legio III Italica placed the inscription in honor of Mercurius Arcecius, showing that high officials also invoked local gods. The inscription to Mercurius Censualis was placed by dealers in frankincense at Regensburg.

The chief god of healing was Apollo Grannus. Here evidently the old Keltic god Grannus predominated in the minds of the devotees, even though one inscription hailed from a high official. The cult was concentrated at Faimingen-Lauingen, where the health resort apparently attracted many people.¹³⁶ He was also wor-

¹³⁰ Augsburg: Vollmer, No. 175D; Bregenz: Vollmer, No. 77A.

¹³¹ Augsburg (statuettes): Koepf, Germania Romana, Vol. IV, plates XIX, 1; XXX, 1; Regensburg (bronze statuettes): Dragendorff and Krüger, "Museographie," V. Bericht d. röm.-germ. Kom., p. 52; Drexel, VII Bericht d. röm.-germ. Kom., p. 72; Steinmetz, "Fundchronik," Germania, XVIII, 294; Kempten (bronze and lead bust with attachments to be used as weight for scales): Drexel, Germania Romana, V, 9, plate VI, 5; Gingen (relief): Haug and Sixt, No. 619, p. 685; Bopfingen (bronze statuette): ibid., No. 45, p. 100; Ennetach (relief): ibid., No. 121, p. 43; Bürg (statue): Paret, Fund. a. Schwaben, III, 179.

¹³² Augsburg: Vollmer, No. 105.

¹³³ Unteraal: Vollmer, No. 354.

¹³⁴ Drexel, XIV Bericht d. röm.-germ. Kom., pp. 28 f.

¹³⁵ Arcecius (Bregenz): Vollmer, No. 74B, and possibly No. 74A; Censualis (Regensburg): Vollmer, No. 360; Cimiacinus (Ludenhausen): Vollmer, No. 83.

¹³⁶ Drexel, XVI Bericht d. röm.-germ. Kom., pp. 29 f.

shipped in eastern Gaul and the Rhine area.¹³⁷ Devotees have left their inscriptions in his honor at Brenz (if this was not originally placed at Faimingen), Faimingen, Lauingen, and Unterfinningen (Höchstädt).¹³⁸ An altar was also excavated at Bûrg on the Kocher, where a number of cults were concentrated.¹³⁹ The two inscriptions from Lauingen were placed by legionaries, one by an unknown legatus Augusti pro praetore and the other by a centurion of the legio III Italica.¹⁴⁰ At Faimingen also Apollo Grannus was honored with the Sacred Hygeia, the "mater deum" and possibly Sirona and Jupiter Optimus Maximus Dolichenus.¹⁴¹ We have no definite knowledge of Sirona and Apollo Grannus being worshipped together in Raetia, as was commonly the case in Gaul, the home of Sirona.¹⁴² The restoration of the names of the two gods is possible in an inscription found at Hausen (Dillingen).¹⁴³ At Ennetach (Mengen) a devotee invoked the good will of Apollo Grannus and the Nymphs.¹⁴⁴ The Nymphs are not otherwise mentioned in inscriptions from Raetia, but a delightful relief was found at Schierenhof engraved on a stone which served as a decoration for the outlet from the spring.¹⁴⁵ The large number of coins and the ruins of buildings seem to indicate that a cult flourished at a spring near Signaringen.¹⁴⁶

¹³⁷The inscription at Fycklinge, Sweden, was undoubtedly carried there. See Willers, Die röm. Bronzeimer von Hemmoor, pp. 119 f.

¹³⁸Brenz: Vollmer, No. 201; Faimingen: Vollmer, No. 213; Lauingen: Vollmer, Nos. 217, 219; Unterfinningen(Hochstädt): Vollmer, No. 224; Bûrg: Paret, Fund. a. Schwaben, III, 179. Paret (*ibid.*, p. 290) expresses his opinion that the inscription at Brenz originally came from Faimingen. Faimingen and Lauingen are only a few miles apart. An Apollo statue was found at Nassenfels: Koepp, Germania Romana, IV, 51, plate XXX, 1.

¹³⁹Paret, Fund. a. Schwaben, III, 179.

¹⁴⁰Legatus: Vollmer, No. 217; Centurion: Vollmer, No. 219.

¹⁴¹Faimingen: Vollmer, No. 215.

¹⁴²Drexel, XIV Bericht d. röm.-germ. Kom., p. 29.

¹⁴³Vollmer, No. 222. The two gods are honored together in an inscription beyond the eastern boundary at Baumburg (Trostberg), in Noricum.

¹⁴⁴Vollmer, No. 184.

¹⁴⁵Haug and Sixt, No. 73, p. 132; Koepp, Germania Romana, IV, 63, plate XLII, 4. They are worshipped in an inscription from Tittmoning, Noricum, just beyond the eastern boundary of Raetia.

¹⁴⁶Paret, Fund. a. Schwaben, III, 178. A similar cult flourished at Niedernau (Rottenburg), in Upper Germany.

Among the gods of water who found favor in Raetia are Neptune, the Danube, the Rhine, and Gontia. Neptune was worshipped in the old Roman conception as a god of the water in general, and of streams in particular, in the Rhine and Neckar areas.¹⁴⁷ The millers who used the water of the Danube for their mill dedicated an altar to Neptune at Günzburg.¹⁴⁸ Gontia, a deity equivalent to Neptune, was also invoked at Günzburg according to an altar inscription found recently.¹⁴⁹ This dedication was made by a centurion of the legio I Italica, which was stationed rather remotely in Moesia. Another odd feature of this inscription is that the god is the name of the place, the only instance of this practice in Raetia.¹⁵⁰ The Danube river was worshipped in the thoroughly Roman form "Danuvius," and not "Danubius," at Mengen, and with Jupiter Optimus Maximus at Risstissen.¹⁵¹ The Rhine was similarly honored at Burg (Stein).¹⁵²

Gods whose powers extended over life and death were naturally worth placating, but very few inscriptions of these gods have come down to us in Raetia. If the letters "NIX", or "XIN" on rings found at Rembrechts (Tett nang), are interpreted correctly, we have the only trace of Nixi or Nixae, deities of birth, in Raetia.¹⁵³ The formula "Dis Manibus" is freely used in inscriptions, and may therefore be rather a routine phrase. Dis Pater and Proserpina are addressed on an altar from an unknown location, possibly Heidenheim, while Pluto and Proserpina are remembered at Augsburg.¹⁵⁴ Both inscriptions were placed by women.

Hercules was honored with a statue erected by Aurelius Mucianus, praeses of the province, at Augsburg.¹⁵⁵ A bronze Venus

¹⁴⁷Drexel, XIV Bericht d. röm.-germ. Kom., p. 52.

¹⁴⁸Vollmer, No. 198.

¹⁴⁹Drexel, "Gontia," Germania, XIV, 39 f.

¹⁵⁰An inscription from Weilmörting (Passau) is dedicated to "Noreia Augusta" (Vollmer, No. 434). Bedaluis is also found in Noricum (Vollmer, p. 207).

¹⁵¹Mengen: Vollmer, No. 183; Risstissen: Vollmer, No. 192.

¹⁵²Vollmer, No. 178.

¹⁵³Paré, "Der röm. Schatzfund von Rembrechts, O-A. Tett nang," Germania, XVIII, 194 f.; K. Stade, "Nixibus Sanctis," Ibid., pp. 216 f.

¹⁵⁴Heidenheim (?): Vollmer, No. 209; Augsburg: Vollmer, No. 107.

¹⁵⁵Augsburg: Vollmer, No. 95.

showing the goddess engaged in loosening her sandals was also found at Augsburg.¹⁵⁶ Mythological scenes were of course constantly before the eyes of the people. These were employed on terra sigillata, to fill in the margins and corners of inscriptions on memorials, on mosaics, and especially on jewelry. The scenes of Bacchus on a glass cup at Augsburg, and the bronze Amor at Heidenheim, and a winged Amor in stone at Essingen are worth mentioning.¹⁵⁷

We will conclude this part of our discussion with a brief reference to emperor worship in Raetia. The "In honorem domus divinae" and the addition of "Augustus" or "Augusta" to the name of the gods, which we have noted occasionally above (Mercury and Victoria) are more a reassurance of loyalty and devotion to the sovereign than the rites of a religious cult.¹⁵⁸ The same applies to the expression "numini Augusti." Three of these, none with a fully satisfactory reading, however, have been found at Eining, Weissenburg, and Gnotzheim.¹⁵⁹ Two inscriptions from Augsburg record one time priests who were undoubtedly engaged in the cult of the emperors, but otherwise nothing is known of the cult.¹⁶⁰

We now turn to the oriental cults, whose presence in Raetia is confined exclusively to cities, crossroads, and posts of the beneficiarii. Their entrance into Raetia was effected mostly by soldiers through the transfer of troops from the orient or through the frequent shifting of centurions whose mobility greatly favored a mixing of ideas. Traders and merchants contributed their share in introducing these peregrine cults. Some of these eastern gods are regularly known by their Latin names,

¹⁵⁶Koepp, Germania Romana, Vol. IV., plate XXXIX, 5.

¹⁵⁷Bacchus scene (Augsburg): Drexel, Germania Romana, Vol. V, plate XXII, 1; bronze Amor (Heidenheim): Haug and Sixt, No. 41, p. 94; Amor in stone (Essingen): Haug and Sixt, No. 60, p. 124.

¹⁵⁸Drexel, XIV Bericht d. röm.-germ. Kom., p. 10; Haug and Sixt, p. 43.

¹⁵⁹Eining: Vollmer, No. 343A; Weissenburg: Vollmer, No. 315; Gnotzheim: Vollmer, No. 308. Municipes recruited in Raetia placed an inscription in honor of the "Genius imperatoris" at Aquincum in 267 A. D. (CIL, Vol. III, No. 3424; cf. Domaszewski, Die Religion d. röm. Heeres, pp. 77 f. [reprint]).

¹⁶⁰Vollmer, Nos. 137, 138. Western Switzerland of course followed Gaul in the well developed emperor cult. Practically nothing is known of religious life in the Raetian part of Switzerland (Stähelin, p. 466). See supra, p. 30.

as Jupiter Dolichenus and Sol. As far as the process of Romanization is concerned these cults seem to have had an unfavorable effect, since their spirit was not in harmony with the character of Roman nationalism.¹⁶¹

Jupiter Dolichenus and Mithras were and remained predominantly gods of the soldiers, although Syrian slaves and merchants fostered the former cult also. Jupiter Dolichenus was the Syrian Baal, the thunder and war god at Doliche in Commagene.¹⁶² His cult flourished especially under Commodus and the Severi, while it rapidly declined in the third century, the last dated inscription being from 250 A. D. The Rhine and Danube provinces were sprinkled with the cult, while the Aventine and Esquiline in Rome also produced evidence of the cult. The chief center was at Carnuntum, Pannonia, where he became the chief god after he had completely dislodged Jupiter from this position. From here his fame spread into Noricum, Raetia, and the Germanies. The eagle was his symbol, a fact which perhaps aided the dissemination of the cult since the soldiers were accustomed to see the Roman eagle. He was also thought to have been the patron of iron mining, but the expression "Ubi ferrum nascitur" presents difficulties in its interpretation.¹⁶³ Three inscriptions from Pfünz, two of which are bronze plaques with punched lettering, show that a cult center was established at this place.¹⁶⁴ The inscriptions are very meagre, but the spelling of the name is worth noting. On one we have "Duliceno," and on the other "Doloceni," which would indicate that the inscriptions were not placed by Romans. Here at Pfünz was evidently a fully developed congregation of devotees with priests and the appropriate buildings of a cult center. It has also been suggested by some that Pfünz must have had iron mines, but this evidence alone is not convincing. At Aalen

¹⁶¹Cf. Domaszewski, Die Religion d. röm. Heeres (reprint), p. 57.

¹⁶²Cumont, "Dolichenus," P.-W., Vol. V, cols. 1278 f.; A. H. Kan, De Iovis Dolicheni Cultu (Groningae, 1901); Friedländer, III, 145 f.; Drexel, XIV Bericht d. röm.-germ. Kom., pp. 60 f.; Domaszewski, Die Religion d. röm. Heeres, pp. 59 f.; Winkelmann, "Die vorröm. und röm. Strassen in Bayern zwischen Donau und Limes," XI Bericht d. röm.-germ. Kom., p. 13.

¹⁶³Cf. especially Winkelmann and Cumont as cited supra,

n. 162. ¹⁶⁴Pfünz: Vollmer, Nos. 270, 271, 272; Drexel, Germania Romana, II, 34, plate XI, 5.

Jupiter Dolichenus is represented standing on a horse in the generally accepted Babylonian manner, and next to him on a cow is Juno (Dea Syria).¹⁶⁵ A dedication was made to him at Straubing in 163 A. D. by veterans of the cohors I Canathenorum, who undoubtedly brought him along into Raetia.¹⁶⁶ He may have also been worshipped at Faimingen.¹⁶⁷ The cult was closely related with the worship of Sol, whom we will consider next.

Mithraism has left no monumental remains in Raetia as in the Rhine basin. Part of a mithraeum was recently excavated at Nassenfels, where the ground plan indicates the presence of a group of devotees.¹⁶⁸ A taurobolium was perhaps situated here, since forty shoulder blades of cattle have been found in the ruins. On the whole we are dependent on inscriptions and small antiquities. Inscriptions on altars and bases of statues have been recovered in the valley of the Eisack, at Epfach, Augsburg, Günzburg, and Faimingen.¹⁶⁹ The inscription from Augsburg proudly proclaims the fact that Valerius Venustus, praeses of Raetia, restored the temple of Sol Invictus from the foundation. The god is addressed as Mithras, Sol, or Mithras Sol. Small cult articles have been found at Bopfingen, Aalen, Heubach, and Regensburg.¹⁷⁰

Indications of the Magna Mater cult are rare in Raetia. A small terra cotta figure of the mother goddess was found at Leuting (Ingolstadt) recently.¹⁷¹ A small head, with the characteristic crown, from Aalen, has been identified as the Magna

¹⁶⁵Haug and Sixt, No. 57, p. 121.

¹⁶⁶Straubing: Vollmer, No. 427.

¹⁶⁷Kan, p. 107; Vollmer, No. 215 (where the restoration of his name has been suggested. Apollo Grannus, Sacred Hygeia, and mater deum are also mentioned on this inscription).

¹⁶⁸Winkelmann, Germania, XIV, 86 f.

¹⁶⁹Valley of the Eisack: Vollmer, No. 60 (deo invicto et Soli socio); Epfach: Vollmer, No. 84 (Soli); Augsburg: Vollmer, No. 191 (deo invicto Soli); Günzburg: Vollmer, No. 195 (deo invicto Mithrae); Faimingen: Vollmer, No. 216 (Soli deo). Vollmer, No. 191 is from Augsburg, not from Zwiefalten (Münsingen)--see Haug, Fund. a. Schwaben, XXII-XXIV, 65 f.

¹⁷⁰Bopfingen (head with Phrygian cap): Haug and Sixt, No. 47, p. 101; Aalen (agate engraved with representation of sun god): Haug and Sixt, No. 58, p. 124; Heubach (gem engraved with "Sol Helios"): Haug and Sixt, No. 509, p. 133; Regensburg (silver decoration with head of sun god): Walderdorff, Verh. d. hist. Ver. von Oberpfalz und Regensburg, I, 437.

¹⁷¹Witz, "Fundchronik," Germania, XIII, 207.

Mater, or Tutela.¹⁷² Representations of Attis were found on an inscription placed by a Raetian cohort at Andernach, but no traces of Attis are found in Raetia.¹⁷³ These troops perhaps met this god at their camp at Windisch, or elsewhere outside of Raetia.

The last oriental cult which left its mark in Raetia is the Isis cult from Egypt. Isis found few devotees in the Rhine valley, and in Raetia the cult is found only on the outer edge of the province and in Augsburg.¹⁷⁴ The only inscriptions discovered were placed in the valley of the Eisack near Seben by Titus Julius Saturninus, a conductor portorii Illyrici.¹⁷⁵ One is dedicated to "Isis Augusta," and the other to "Isis Myrionyma." Thus the Roman and a local influence seem to have robbed Isis of much of her original Egyptian character. Some traces of the cult have been found at Augsburg, but these may have represented merely a motif in decorations rather than a religious cult.¹⁷⁶ A few other traces of the cult have been found just beyond the boundary of Raetia.¹⁷⁷

Thus ends the summary of gods in whom the people of Raetia placed their hopes, at least as far as our evidence goes. But the old gods were destined not to hold their own. Slowly Christianity penetrated the province and eventually stifled the cults of all old gods. This procedure can be observed in some of the inscriptions of the late Roman period as Christian inscriptions begin to appear. Chur, an important center for the Roman Catholic Church today, has preserved three of these.¹⁷⁸ From Eining we have a bronze ring with the Christian wish, "Vivas in deo."¹⁷⁹ But paganism did not succumb to the new exclusive religion without a struggle. Graced with a monogram of Alpha and Omega with a Rho

¹⁷²Haug and Sixt, No. 56, pp. 120 f.; Koepp, Germania Romana, V, 64, plate XLV.

¹⁷³Rudolf Laur-Belart, "Spuren des Attis-Kybelekultes in Vindonissa," Germania, XVII, 190 ff.

¹⁷⁴Drexel, XIV Bericht d. röm.-germ. Kom., p. 61.

¹⁷⁵Vollmer, Nos. 57, 58.

¹⁷⁶Clasp in the shape of a Serapis bust: Drexel, VII Bericht d. röm.-germ. Kom., pp. 33, 35; numerous representations of Isis, Serapis, and Anubis on fragments of pottery; Ohlenroth, "Fundchronik," Germania, XVI, 150.

¹⁷⁷In the Steiermark: CIL, Vol. III, Nos. 4809, 4810; in the valley of the Aeneuni: Acta SS. May. VII. 44.

¹⁷⁸Vollmer, Nos. 70, 71, 71A. ¹⁷⁹Vollmer, No. 351A.

forming a cross in the center, an inscription at Regensburg was set up to the memory of Sarmonnina, who had been added to the blessed through the death of a martyr.¹⁸⁰ But the struggle weakened; Christianity was victorious. Soon the Catholic Church was triumphant, and she has maintained this position to the present day.

¹⁸⁰Vollmer, No. 419.

CHAPTER VII

ROMANIZATION

The Roman policy of provincial administration seems to have placed little stress on Romanization. From our point of vantage today, some eighteen centuries later, it appears that Rome did little with the definite purpose of reshaping the native culture of Raetia and of establishing Roman ideals. But this lack of a visible policy may have been a tower of strength. The results of experiments made by European nations in recent centuries show that this is a very delicate problem, doomed to utter failure if not guided by a subtle touch of diplomacy. Perhaps the Roman diplomats and statesmen had developed a system which has not been transmitted to our modern schools of diplomacy.

It is really not correct to speak of a Roman policy in the Romanization of Raetia. What Rome did can be characterized negatively more readily than positively. Irritations were avoided; old prejudices permitted to run their course; and animosities to consume themselves. There was no high-powered propaganda machine, no program of education.¹ There is no evidence of force or compulsion. What James Smith Reid has said of Roman provincial administration applies fully to Raetia when he says:

Because the Romans were in some ways the greatest organizers whom the world has known, it was often tacitly assumed that, in dealing with conquered peoples, they were animated from the first by a passion for immediate domination and for grinding uniformity. The evidence which will come before us will display them as they really were, political opportunists to a degree unsurpassed in history. As rulers their distinctive mark was not rigidity, but elasticity, pliability, adaptability; and therein lay the chief secret of their success. When a conquest had been achieved, it was their custom to interfere with local conditions only so far as immediate necessity required. Their general desire in government was to find and to follow the line of least resistance. Modern states might learn from them some useful lessons. They car-

¹F. S. Marvin (*Western Races and the World* [Oxford, 1922], pp. 104 f.) cites evidence on endeavors of formally educating provincials, and quotes opinions of H. Stuart Jones, Sir William Ramsay, Camille Jullian, and Franz Cumont.

ried toleration of local diversities to an extreme. They rarely interfered with any cult, however barbarous. They never essayed, like some foolish governments of after times, and indeed of our day, to stamp out a native language. The culture which they offered to the conquered races of the West was never pressed upon them by violence.²

The other extreme, that the Roman emperors gave no thought whatever to the processes of Romanization, is undoubtedly not true. On the surface it appears that all was well in the minds of the officials as long as the inhabitants were peaceful and the barbarians beyond the border were not disposed to irritate the Roman Leviathan. Yet there is evidence of planning, such as the transfer of troops and promotions of centurions from unit to unit and province to province, which cannot be explained wholly on the grounds of military expediency. Perhaps a subtle system of Romanization was employed which was so delicately framed that all traces have vanished. Be that as it may, there were certain potent forces constantly at work to promote the assimilation of Roman culture and Roman ideas.

Romanization was fostered by various forces, all of which depended upon the movements of people.³ In Raetia the most effective carriers were the officials, both civil and military.⁴ Very few antiquities and inscriptions are left if we eliminate those which came from the military and administrative centers. The number of merchants, traders, professional men, and farmers from Italy, and even from other parts of the Empire, must have exerted

²J. S. Reid, Municipalities of the Roman Empire (Cambridge, 1913), pp. 15 f. Similar expressions are made by T. R. S. Broughton, The Romanization of Africa Proconsularis (Baltimore, 1929), pp. 134, 192, 209, 224-28; G. H. Stevenson in Cambridge Ancient History, X (Cambridge, 1934), 209; Hugh Last, ibid., XI (Cambridge, 1936), 445.

³Last mentions three factors as active agents in the process of Romanization in general: (1) merchants and farmers, who exerted their influence through organizations, as the conventus (ibid., p. 441); (2) the standing army through the continuous process of recruitment and discharge, rather than through the foundation of colonies for veterans (p. 443); (3) the receptive attitude of the Romans, who lacked the Greek consciousness of cultural superiority, and the benefits of the Augustan Peace (p. 445).

⁴Theo. Mommsen (Die Schweiz in röm. Zeit [1854], p. 16) estimates that nine-tenths of the inscriptions of Roman Switzerland owe their origin directly or indirectly to the Imperial administration. The same proportion would probably prevail for Raetia also.

a very negligible influence on the Romanization of the Raetians. Still less must have been the contribution made by people of Raetia who visited Italy and returned impregnated with Roman ideals. We have no record of embassies traveling to Rome, or of rich people visiting the capital of the Empire. Immigration apparently also represented a trifling factor, since Raetia offered no incentive for voluntary immigration, and settlement by veterans was practiced rarely.⁵ All in all, the chief carrier of Roman ideas and ideals was the army.⁶

⁵O. Paret's statement (*Die Römer in Württemberg* [Stuttgart, 1932], III, 200: "Die Bevölkerung vermehrte sich offenbar rasch, wobei Zuzug von Aussen eine nicht geringe Rolle spielte") that the population received substantial increase through immigration must be taken with moderation. The migration of merchants and craftsmen, to which he refers, could never have been large. We are today familiar with the shifts of thousands of workers from one city to another as a factory opens, or as an oilfield is developed. Even if his conclusion is accurate for the part of Raetia in modern Württemberg, it is very doubtful whether it applies with equal force to the remaining part of Raetia. Then too, many of these were not Romans. Paret (p. 201) adds cautiously: "Es muss noch bemerkt werden, dass, wenn von den Römern in Württemberg die Rede ist, nicht an Italiker oder gar Stadtrömer gedacht werden darf. Nur unter den Beamten, Offizieren, Kaufleuten mochten vereinzelte Italiker sein." Cicero's statement, "Ubi cumque vicit Romanus habitat" (*Cons. ad. Helviam* 7. 7), certainly does not apply to Raetia if taken literally. The appeal for a strong influx of Romans was lacking.

⁶E. Speck (*Handelsgeschichte* [Leipzig, 1906], III, 2b, p. 502, par. 835) puts it thus: "Am kräftigsten von allen Mitteln der Romanisierung wirkte das Heer. Mit unwiderstehlicher Gewalt riss diese eiserne Organization die Provincialen aus ihrer Vereinzelung und nötigte sie, dem fremden Wesen sich zu erschliessen, das sie mit immer festeren Banden umschürte. Die Söhne der verschiedensten Nationalitäten dienten in den Auxilien. Die früh sich bildende Sitte, die Truppenteile in die von ihrer Heimat entferntesten Landesschaften zu verlegen, musste dieselben von ihrer Nation loslösen und haltlos dem assimilierendem Einflusse ihrer Kameraden und Offiziere überliefern." The same thought is more forcefully expressed by Hugo Arnold ("Das röm. Heer im bayer. Rätien," *Beit. z. Anth. u. Urg. Bay.*, XIV, 82 f.): "Ich verweile mit solcher Ausführlichkeit bei den 'canabae,' weil sie die Pflanzstätten, die Soldaten die Träger der römischen Kultur und der mit der Zeit vollständig durchgeführten Romanisierung unserer Lande waren. Der Dienst im Heere eines mächtigen Staates wirkte zu allen Zeiten schon durch die Macht der Ideen und den Druck der Massen assimilierend auf Fremde, unter den Truppen befindlichen Elemente ein; letztere verlieren von selbst nach und nach ihre Stammeseigenheiten und bequemen sich mehr und mehr der Nationalität des herrschenden Volkes an. Die Hoheit, Grösse und Macht des die Welt beherrschenden Imperiums offenbarte sich ihm täglich bis zu den kleinsten Erscheinungen herab, so dass unwillkürlich seine Brust in stolzem Hochgefühl schwellen musste,

The soldiers in Raetia were stationed at widely scattered localities, but just in those places where Romanization struck the deepest root. The uniform always appeals, whether it be the simple garb of the ancient soldier or the highly colored uniform of today. The soldier with his panoply of arms was a hero, an object of admiration and imitation. He it was who held the enemy at bay beyond the border, who tracked down the "hijackers" and public enemies within the province--in short, who was gratefully remembered by the populace for its security. He spoke the Latin tongue, the language of all officials in fact. Thus he served as a model in establishing the Roman way of living.

In a large part of Raetia there was no escape from the influence of the military machine. The camps and forts were the nuclei of so many civil settlements, large and small. The desires of the soldiers created a great demand for supplies. Household utensils, wearing apparel, and perhaps even weapons to some extent, made according to Roman specifications, thus found a ready market. A very forceful reminder of Roman prestige was the limes. The palisades, the wall, the ditch, and the watchtowers were concrete evidence that Roman power could not be flouted. For centuries this monument of Roman engineering skill made a deep impression on the people of the immediate vicinity, and was an object of astonishment to those beyond. The post system, which functioned so effectively over the extensive system of highways, was also a telling factor. The frequent sight of long columns of troops, the endless supply trains, and the hustle and bustle of the officials at the stations along the highways--all of these made a deep impression on the native dwellers. The milestones,

selbst ein Glied in dem grossartigen Triebwerke des gewaltigen Organismus zu sein; Hiermit war er im Geiste bereits zum Römer geworden, wesshalb die Umformung seines Wesens mit Raschheit sich vollzog. Wie hätte es auch anders sein können? Als ein junger Mann wurde der Rekrut einem Rahmen einverleibt, der völlig römischen Zuschnitt trug; die Dienstsprache war Latein, die Officiere waren Italier oder gaben sich wenigstens als solche; alle Augen waren auf Rom und den Kaiser gerichtet; an die Feldzeichen knüpfte die treu gehegte Überlieferung die stolzesten Erinnerungen, und nach Vollendung der Dienstpflicht winkte als höchste Belohnung die Adelung vermittelt des römischen Bürgerrechtes. Das waren Auszeichnungen zur Genüge, um den Mann innerlich und äusserlich zum Römer noch eher werden zu lassen, als bis ihn nach 25jährigem Dienst das Gesetz auch formell dazu stempelte." Cf. also Liebenam, "Exercitus," in P.-W., Vol. VI, col. 1658; Arnold, Beit. z. Anth. u. Urg. Bay., XIV, 87.

erected at places where traffic was heaviest, incited veneration of the imperial majesty, not only by their very presence, but also through the inscriptions which flashed the imperial title, dates of the reign, tribunate, and consulship. Recruiting, which was carried on very energetically in Raetia, brought the attention of Rome to the natives even in those localities which were ordinarily little ruffled by Roman officials. All art, sculpturing particularly, shows the military influence to a very marked degree.

Since Romanization in Raetia was primarily fostered by the army, it is easy to reach false conclusions from this fact. It has been pointed out that the province was left to the protection of auxilia for almost two centuries.⁷ It is understating the case to say that the troops "were there (in Raetia) merely to bar the road through the mountains to Italy against barbarian foes."⁸ What Raetia was and what the Romans attained in Romanization there was above all the work of the auxilia scattered along the entire northern portion of the province. The legion came late, in the sixties of the second century, too late to be a dominant factor in the Romanization of the province. The province had reached its fullest development. Furthermore, incessant wars and campaigns hindered the legion in exerting the greatest influence in Romanization. Regensburg never attained a municipal status, nor did it develop into a great commercial city; it remained a military town. The legions after Hadrian were, in general, less a factor in the process of Romanization. Perhaps the legio III Italica, as the name would indicate, showed a strong Roman flavor, at least for some decades while the original stock lasted. When local recruiting became the general practice after the time of Hadrian, the legion also was replenished with non-Italian stock as vacancies were filled with replacements. The centurions were still of Italian origin. There is no evidence that the legion exerted any

⁷The following statement by Mommsen is typical (Roman Provinces [New York, 1909], I, 197): "Special considerations, as we have formerly shown, compelled the government to send to Raetia simply troops of the second class, and, though these were not inconsiderable in number, the smaller headquarters of alae and cohortes could not have exercised a civilizing and town-forming effect like the camp of the legion." Cf. Friedrich Wagner, Die Römer in Bayern (München, 1928), p. 35; Friedrich Koepp, Die Römer in Deutschland (Bielefeld and Leipzig, 1926), p. 98; Speck, p. 789; Reid, pp. 203 f.; Last, Cambridge Ancient History, XI, 445 ff.

⁸Reid, loc. cit.

appreciable influence far from Regensburg. Thus the auxilia and the staff of officials at Augsburg seem to have been mostly responsible for the introduction of Roman ideas and materials.

The Roman provinces show a remarkable uniformity and sameness. This is true also of the culture found in Raetia. Roman art, in the main, shows the usual characteristics.⁹ The same applies to the equipment of the soldier.¹⁰ The homes of the civilians were constructed according to Roman principles of architecture. Heating was done by means of braziers or a hypocaust system introduced from Italy. The native costume gave way to the prevailing Roman style. In brief, the excavations show that the Roman way of living was generally accepted, including the manner of burial.¹¹

⁹Ludwig Friedländer, *Sittengeschichte* (Leipzig, 1919-21), III, 92: "Als das hauptsächlich charakteristische der Kunst des Kaiserreichs erscheint vor allem ihre bei der Ausbreitung über ein so weites Gebiet doppelt auffallende Gleichförmigkeit in Gegenständen, Auffassung, Behandlung und selbst Technik. Mit Ausnahme Galliens, besonders des belgischen, wo jene eigenartige neue Kunstrichtung entstand, und Agyptens, wo die uralte nationale fort dauerte, ist bei den Überresten der Kunst im ganzen Reich der Eindruck der Gleichartigkeit der weitaus überwiegende und selten sind Differenzen wahrnehmbar, die nicht aus der Verschiedenheit der nachgeahmten Vorbilder, aus der höheren oder geringeren Blüte der Epoche und aus der grösseren oder geringeren Kunstfertigkeit der Künstler herzuleiten wären. Man kann es keinem Mosaikbilde ansehen, ob es in Tunis oder England, in Andalusien oder Salzburg ausgegraben ist. Bei der Analyse vom bemalten Stück von der Wandbekleidung römischer Häuser zu Bignor in Sussex fand Sir Humphry Davy dieselben Farbenbestandteile, wie in dem bemalten Stück der Titusbäder und der Häuser von Pompeii und Heroulanenium; und ebenso stimmt die Wandmalerei der römischen Villen im belgischen Gallien und der pompejanischen nicht bloss in Dekoration und Technik überein, sondern auch die Zubereitung des Wandbewurfs sowie die Art des Farbauftrags sind im wesentlichen dieselben hier wie dort. Überall arbeiteten Steinmetzen und Bildhauer nach italischen Vorbildern. Im Escherntal bei Hallstadt ist ein römisches Grabdenkmal in Giebelform gefunden worden, das ein Medaillon-porträt zwischen einer liegenden weiblichen Figur und einem Genius darstellt; ähnliche Monumente gibt es in Huesca in Aragonien, in Frankreich, Italien und Dalmatien."

¹⁰G. L. Cheesman, *Auxilia of the Roman Imperial Army* (Oxford, 1914), p. 132: "The most striking fact which emerges from this inquiry is the general uniformity of the equipment of nine-tenths of the auxillary regiments in the second century. We learn from casual references in Tacitus that this uniformity has always been the ideal of the Roman War Office (Ann. xii. 16 and Hist. iii. 47), and from the military point of view there was doubtless much to recommend it. It has, however, more significance if we regard it as one phase in that extension of a uniform material culture through at any rate the western half of the Empire which marks the first and second centuries."

¹¹Sometimes the change from the native to the Roman manner is clearly seen in the graves. H. Dragendorff ("Schweiz," IV Bericht d. röm.-germ. Kom., p. 104) records an instance.

The greatest common denominator in this uniformity undoubtedly was the Latin language. All orders and commands in the army, all formal pronouncements by the civil officials, the processes of law in the courts and the laws themselves were expressed in Latin. Merchants and traders continued the use of their native tongue, but here also Latin predominated. A large part of the native population soon learned Latin in order to compete more effectively in the open market. Latin must also have been in common vogue among the society people. The receptability of the Raetians and the proximity of the province to Italy stimulated the adoption of the new language. Most probably Latin was used by all who would gain an advantage thereby. As the contact with things Roman became less direct, the use of Latin advanced more slowly.¹² Gradually, at least to a certain extent, the use of Latin may have penetrated even into the thinly populated mountain areas of southern Raetia.¹³ The personal names on inscriptions throw an interesting light on this subject. The form of the tria nomina is commonly found and the Roman endings were very popular, although many were clearly Romanized from native forms. This change can also be observed in the names of wives of soldiers who had married native girls.¹⁴

The uniformity of the Empire is also seen in the religious rites and cults of Raetia. But this uniformity was more apparent than real. As we have seen, the Roman gods did not triumph over

¹²Mommsen (Die Schweiz in röm. Zeit, p. 15) concludes: "Was die Romanisirung des Schweizergebietes betrifft, so leidet es nicht den geringsten Zweifel, dass überall die römische Sprache die officielle und überhaupt die einzige Schriftsprache war, was übrigens, mit Ausnahme der griechisch, ägyptisch oder punisch redenden und schreibenden, d. h. überhaupt mit Ausnahme der alt-civilisirten Landschaften im gesammten Römerreich der Fall war." Dr. Baumann ("Die Bevölkerung des bay. Schwabens in ihrer geschicht. Aufeinanderfolge," *Beit. z. Anthr. u. Urg. Bay.*, XII, 107) states more emphatically: "So entstand in Rätien ein Mischvolk mit lateinischer Sprache und römischer Gesittung. An keltische Mundart erinnerte da bald nichts mehr als die Namen der Flüsse und einiger Ortschaften."

¹³Mommsen (loc. cit.): "Ebenso unzweifelhaft ist es aber, das trotz jener officiellen Romanisirung die Bevölkerung an vielen Orten noch lange ihre ursprüngliche Nationalität und als Patois auch ihre Sprache bewahrt hat. Ob dies in der Ostschweiz der Fall war, lässt sich weder behaupten noch verweisen; so ist möglich und nicht ganz unwahrscheinlich, dass erst die hineinströmenden römischen Flüchtlinge aus den Ebenen hier die "romanische" oder "ladinische" Sprache völlig allgemein gemacht habe."

¹⁴Cf. P. C. Planta, Das alte Rätien (Berlin, 1872), p. 218.

the native gods, but shared honor with them.¹⁵ From our observations of religious conditions in Raetia, it is evident that Roman religious ideas found entry difficult. The native gods appear under Roman names. Thus the captives carried the captors captive by merely surrendering their name. The force of old traditions proved too strong to be uprooted. As Drexel has pointed out, the lack of gods of the field and farm is striking.¹⁶ Although the economic condition of the farmers may be partly responsible for this, the fact apparently remains that the rural areas were slower in adopting the Roman deities for their occupations. Not too much stress should be placed on this point, however, since most inscriptions by far come from urban communities. We do not know whom the farmers worshipped, although the country gentry who dwelt in villae rusticae worshipped Roman gods.

To what extent were the people of Raetia Romanized? Was it merely a veneer culture, or did it quicken the innermost fibre? Did it reach the common man in the street, or behind the plow? These are tantalizing questions which have engaged the interest of many writers. No conclusive deduction can be made, no matter how strongly it is fortified by finely spun argumentation. Our direct evidence is too incomplete. Even today it is not possible to state accurately to what degree Alsace is German or French, or just where the national boundaries of Poland should be drawn. Romanization varied in degree considerably from province to province, and so the conclusions made by students in regard to Raetia vary considerably also.¹⁷

¹⁵ Dragendorff (Westdeutschland zur Römerzeit [Leipzig, 1919], p. 104) describes the relationship between the two religions very accurately, for Raetia also, when he says, ". . . die römische Religion hat die gallische nicht unterworfen und verdrängt, sondern ist ein Bündnis mit ihr eingegangen."

¹⁶ F. Drexel, "Götterverehrung im röm. Germanien," XIV Bericht d. röm.-germ. Kom., p. 53.

¹⁷ Dragendorff (Westdeutschland zur Römerzeit, p. 114) comes close to an accurate appraisal of the situation in general when he says: "Nur zu leicht sind wir zu der Vorstellung geneigt, dass die römische Herrschaft aus den unterworfenen Völkern Römer gemacht habe. Dass das keineswegs der Fall war, dass trotz aller Beeinflussung durch römische Kultur, trotz allem, was der Eroberer den Barbaren brachte, trotz dem äusseren Schein, den gerade die uns erhalten gebliebenen Monumente dieser Zeit bei flüchtiger Betrachtung erwecken konnten, die Völker ihre Nationalität wahrten, bei uns so gut, wie es etwa für die Griechen oder für die Semiten Asiens jedem bekannt ist, das zu zeigen ist eine der Hauptaufgaben gewesen, die dieses Büchlein sich gestellt hat. Wirklich Römer

Differences of degree also are found within the province.¹⁸ Raetia was more a political unit than a cultural entity. The gulf between the mountain folk of the South and the inhabitants of the North was as marked, it seems, as the outlook of our modern "hill-billies" differs from that of the New Yorker. Where the Roman touch was felt, there Romanization made progress in a corresponding degree. The army camps, the trade routes, and the points of official residence gave the northern part a decided advantage. Concentration of population naturally aided the processes of Romanization. But the southern portion was not left completely un-Romanized.¹⁹ The work was slower here, and also later. The period of the invasions really brought it to a climax. Although Roman life now struck root deeply and was to linger longer, it was, and always remained, much inferior to that of the North. The rigors of life were not conducive to a deeply seated development.

In comparison with other Roman provinces Raetia lagged behind. Of all provinces added to the Empire by Augustus, Raetia was one of the slowest to adopt Roman customs and habits. Unlike the eastern provinces, such as Greece, Asia Minor, and Egypt, the province did not enjoy a highly developed culture which could hold its own against Roman influence. Instead, Raetia was on a low cultural level, with much room for advancement. Noricum, which came under Roman influence under approximately the same conditions, soon acquired the appearance of a Romanized land. Her accessibility to Italy and a demand for her resources opened the way for

geworden, in der Nation des Siegers völlig aufgegangen, sind immer nur einzelne." Julius Jung (*Römer und Romanen* [Innsbruck, 1887], pp. 90 f.; *Die Romanischen Landschaften* [Innsbruck, 1891], pp. 354 f.) states similar conservative conclusions. Similarly Broughton (pp. 156, 228) states in the last sentence of his book (p. 228): "The Romans adapted themselves to Africa; they gave her peace, and made her prosperous, but they never made her Roman." Rather enthusiastic conclusions about the degree of Romanization of Raetia are made by Alfons Dopsch, *Europ. Kulturentwicklung* (Wien, 1918-20), I, 121; G. T. Rudhart, *Älteste Geschichte Bayerns* (Hamburg, 1841), p. 189; H. Weber, "Das röm. Heer in bayer. Rätien," *Beit. z. Anth. u. Urg. Bay.*, XIV, 87.

¹⁸ Cf. F. Weber, "Beiträge z. Vorgeschichte von Oberbayern," *ibid.*, p. 2.

¹⁹ Mommsen, *Die Schweiz in röm. Zeit*, p. 15; Felix Stähelin, *Die Schweiz in röm. Zeit* (Basel, 1931), pp. 317 ff.; Otto Schulthess, "Ein Dezennium röm. Forschung in der Schweiz," *XV-Bericht d. röm.-germ. Kom.*, pp. 25 f.; Jung, "Bevölkerungsverhältnisse des röm. Reiches," *Wiener Studien*, I, 187.

speedy Romanization. Her economic resources were developed, and soon she furnished recruits for the legions and the Praetorian Guard. In Raetia the penetration of Rome's influence showed little progress. She attracted few people, because she did not develop into a big consumer of Roman goods, nor a producer of goods wanted in Italy. The highways served primarily a military purpose. They led either to the limited markets of Raetia or served as arteries for through traffic. There was little incentive for production, because the producers of the neighboring provinces found transportation facilities in their favor. Nor was there a market in the thinly settled region north of Raetia in the land of the barbarians. The Rhine surpassed the Danube in all forms of activity, and the shallow waters of the Danube in Raetia did not stimulate the movement of commodities. The constant dread of war or invasion was also a deterring factor. Although Raetia was well supplied with soldiers, no military center from which Roman culture emanated with vigor was ever developed. Regensburg, in this respect, never became the power in her region as Bonn or Cologne on the Rhine. The principal reason for this must be sought in the fact that physical characteristics and the position of the province on the northern border, coupled with a limited supply of natural resources, conspired against the economic well-being of Raetia.

Whether shallow or thoroughgoing, the Romanized culture of Raetia clung tenaciously to its forms when it met with the Germanizing influence of the invaders after the fall of Raetia.²⁰ The Roman tint, very pronounced at first, is traceable far into the stream of Medieval history; in fact, it has continued to the present day.²¹ The very name of the province has been perpetuated through a series of changes in the present "Ries." Roman place names, in general, strangely showed the least resistance and

²⁰The persistence of things Roman is discussed by the following: R. Heuberger, Rätien (Innsbruck, 1932), Vol. I, passim; Planta, pp. 240 ff., 327 ff., 397 ff.; Stähelin, pp. 310 ff.; Dopsch, pp. 137-69 (Dopsch is an ardent exponent of the theory that the German invaders did not destroy Roman culture ruthlessly); Friedrich Ohlenschläger, Röm. Überreste in Bayern (München, 1902-10), pp. 2 ff.; F. Haug, "Raetia," in P.-W., Vol. IA, col. 61.

²¹Mommsen, Die Schweiz in röm. Zeit, p. 4; Paret, III, 268.

potency to continue in use.²² The lowlands, which were overrun by the Germans first and settled by the invaders, soon had German names, while the uplands continued to use Roman place names. But as a power in the life of the people Roman influence continued long. Military, political, social, legal, and judicial institutions retained Roman forms far into the Middle Ages.²³ Coinage, ceramics, and art also showed a tenacity to cling to Roman ideals. The modern highway system in the area of ancient Raetia follows the old Roman routes.²⁴ Likewise the Roman post system was conducted unchanged for a long time after the collapse of Roman power.²⁵ Thus life in Raetia long followed a manner outlined by Roman influence. And this despite the fact that the Germans, with the exception of certain words, refused to adopt the Latin language. The habits and customs of several centuries could not be shaken off in a hurry, and so the invaders adopted many of these instead.²⁶ Thus Rome has continued to live in Raetia, even to our age.

²²This question has received much attention, with the result that our knowledge has become more definite in recent years. Cf. B. Eberl, Die Bayer. Ortsnamen (München, 1925), especially pp. 59-74; Julius Miedel, "Die bayer. Ortsnamen," Bayer. Hefte f. Volkskunde, I (1914), 14-25, 161-77; A. Wessinger, "Die Orts- u. Flussnamen in der Umgegend von Regensburg," Beit. zur Vorgeschichte von Oberbayern, pp. 2 ff; F. Weber, Beit. z. Anth. u. Urg. Bay., XIV, 19 f.; Paret, p. 254; Stähelin, p. 389.

²³Cf. especially Heuberger and Planta as cited supra, p. 161, n. 20.

²⁴Arnold, Beit. z. Anth. u. Urg. Bay., XIV, 76.

²⁵E. E. Hudemann, Geschichte d. röm. Postwesens (Berlin, 1878), p. 49.

²⁶The Germans were not entirely ignorant of things Roman before they entered Raetia. This acquaintance, though very casual at best, may have served as a moderating influence towards Roman institutions. Friedrich Kauffman (Deutsche Altertums-kunde [München, 1913], I, 384-86; 466-99) contends that the Germans beyond the Roman frontier adopted much of Roman life. Cf. supra, pp. 114-16.

